

September 30, 2015



## **North Dakota State Investment Board Legacy Fund**

**Investment Measurement Service  
Quarterly Review**

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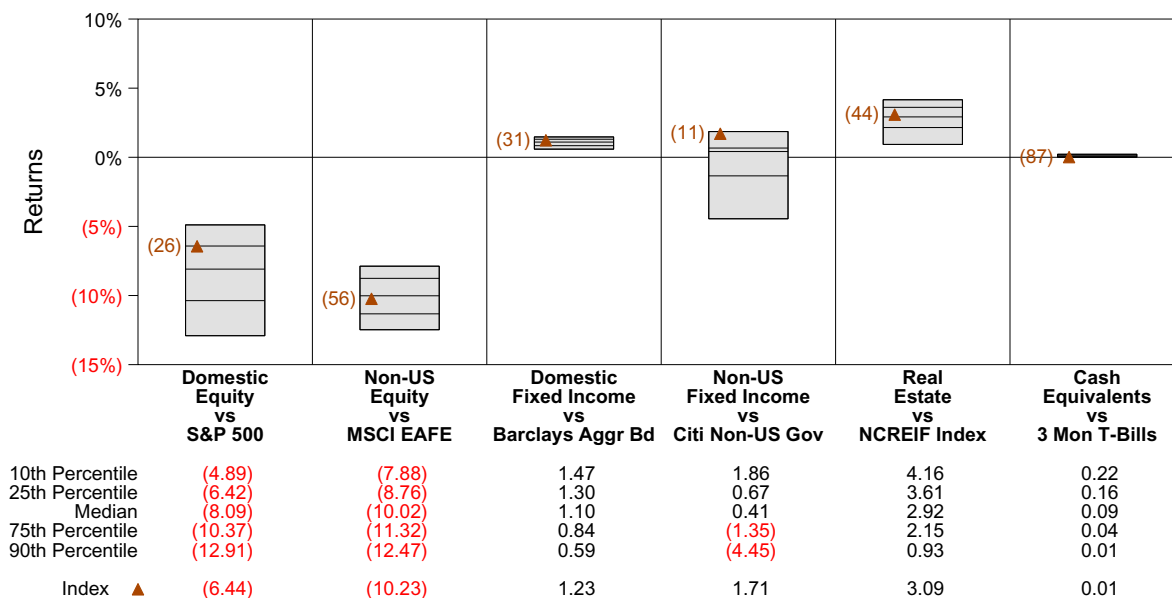
## Market Overview

### Active Management vs Index Returns

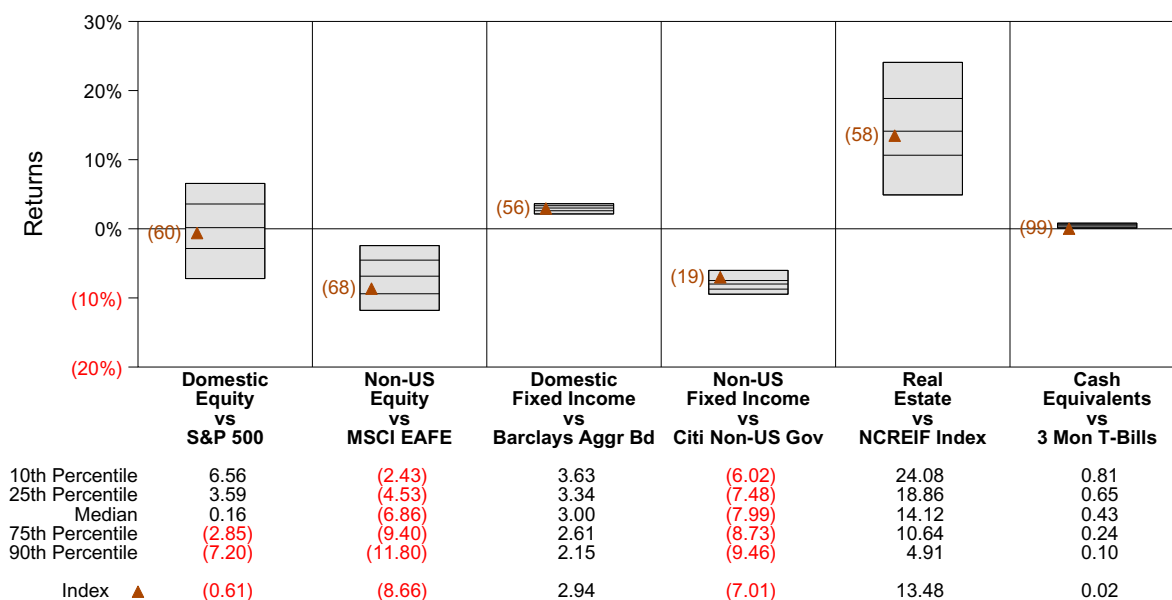
#### Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the domestic equity manager database.

#### Range of Separate Account Manager Returns by Asset Class One Quarter Ended September 30, 2015



#### Range of Separate Account Manager Returns by Asset Class One Year Ended September 30, 2015



Third Quarter 2015

## Made in China

### ECONOMY

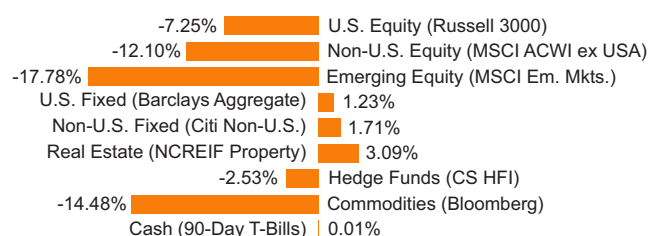
**2** The global economic recovery lost momentum in the third quarter, shaken by the potential for crisis in China. The Fed backed away from raising interest rates in September, citing uncertainty in the capital markets and softening economic data.

## The Home Port is Safest in a Storm

### FUND SPONSOR

**4** Superior U.S. equity returns and a strong dollar have been the drivers of domestic dominance. Yet all fund types lagged, with differences partially explained by asset allocations: fixed income bolstered corporates, while poor alternative and hedge fund performance hurt E&Fs.

## Broad Market Quarterly Returns



Sources: Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

## Nosedive

### U.S. EQUITY

**6** The first negative quarter for U.S. equities since 2012 had a seemingly solid start, but took a nosedive in the second half. All capitalizations declined—the divergence between small and large cap was meaningful (**Russell 2000**: -11.92% and **Russell 1000**: -6.83%).

## Stumbling Dragon

### NON-U.S. EQUITY

**9** Concerns over China's growth and falling commodity prices hammered non-U.S. equity returns into negative territory. The developed world (**MSCI World ex USA**: -10.57%) may have outperformed emerging markets (**MSCI Emerging Markets**: -17.78%), but still lost ground.

## Longer to Liftoff

### U.S. FIXED INCOME

**12** The U.S. bond market reversed course with interest rates falling and Treasuries rising. Spread sectors generally underperformed as spreads widened. The yield curve flattened. The **Barclays Aggregate** gained 1.23%, but the **Barclays Corporate High Yield** slid 4.86%.

## Red Scare

### NON-U.S. FIXED INCOME

**15** Global bond markets had mixed results in the third quarter. The developed market-focused **Citi Non-U.S. WGBI Index** finished at +1.71%. Emerging market sovereigns were plagued by risk aversion and negative currency effects (**JPM EMBI Global Diversified**: -1.71%).

## M&A, Here to Stay?

### REAL ESTATE

**17** The **NCREIF Property Index** advanced 3.09%, recording a 1.22% income return and a 1.87% appreciation return. The **FTSE EPRA/NAREIT Developed REIT Index** (USD) declined 1.42%; domestic REITs increased (**FTSE NAREIT Equity REITs**: 2.00%).

## Public Volatility, Private Slowdown

### PRIVATE EQUITY

**19** Public market volatility dampened private equity activity. Fundraising, new investment, and IPOs fell for both buyout and venture. The number of buyout transactions closed and venture M&A exits increased. This quarter's change is a sharp reversal from the ebullient second quarter.

## Drag Me Down

### HEDGE FUNDS

**20** After a modest rebound in the prior quarter, commodity prices led by oil resumed their secular decline. Representing actual hedge fund portfolios, the median manager in the **Callan Hedge Fund-of-Funds Database** slipped 3.30%, net of all fees.

## Staying Afloat

### DEFINED CONTRIBUTION

**21** The average defined contribution plan managed to avoid losses in the second quarter of 2015—but just barely. Plan balances experienced a slight increase (+0.26%) driven primarily by participant inflows.

# Made in China

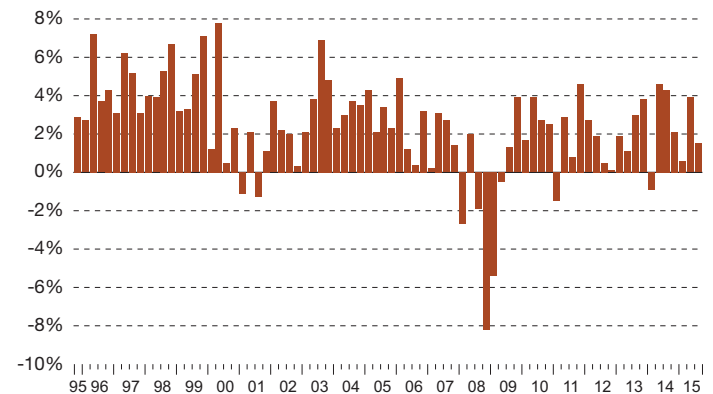
ECONOMY | Jay Kloepfer

The global economic recovery lost momentum in the third quarter, shaken by the potential for crisis in China. Equity prices collapsed in China, and the Chinese government pulled out all the stops—including buying stock and cutting interest rates—to slow the decline, put a floor under the equity market, and calm fears. The stock market episode raised fears that the greater Chinese economy was in peril. Global financial markets were shocked, and equities fell sharply, while high-quality government bonds rallied. Emerging markets took an especially hard hit. Emerging economies typically have much closer ties to the Chinese economy than do Europe or the U.S., due in part to a heavy reliance on the commodities China consumes. Completing the triple whammy for emerging markets is the perceived vulnerability to a rise in U.S. interest rates, and concern surrounding U.S. monetary policy which reached a fever pitch as the summer began. The emerging market equity sell-off in July, August, and September was clearly Made in China. The fear that the Chinese economy may be on the edge of an abyss led to further concern that the Chinese government would embark on a round of competitive devaluation. Virtually all emerging currencies depreciated against the dollar—yet some developed currencies appreciated in expectation of a U.S. interest rate increase.

By the end of the quarter, markets had stabilized, and the worst fears about China did not materialize. However, the shock that rattled investors also rattled businesses and economic activity began to show signs of slowing following a strong second quarter. The Fed backed away from raising interest rates in September, citing uncertainty in the capital markets and softening economic data. Real GDP growth in the U.S. was revised up to 3.9% from 3.7% in the second quarter, fueled in part by continued strength in the job market, solid consumer spending, and what turned out to be an unsustainable run-up in inventories. GDP came in at 1.5%, pulled down largely by the reversal in inventories. GDP estimates softened as job market data began to unravel, first with substantial downward revisions in July and August, and then with a frankly disappointing gain of 142,000 in September. Until September, the U.S. job machine

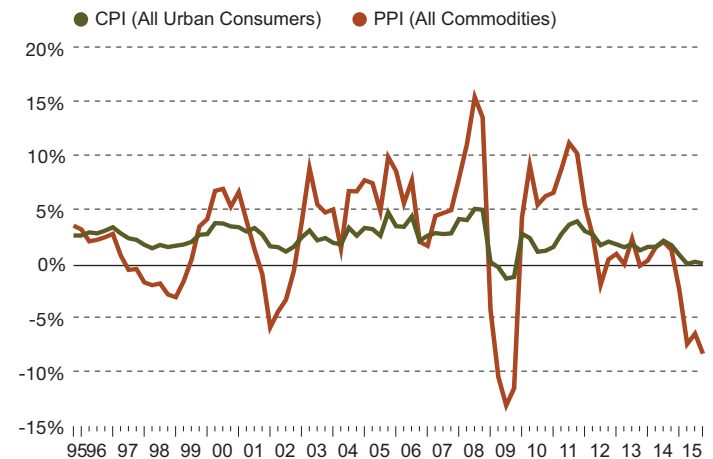
## Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

## Inflation Year-Over-Year



Source: Bureau of Labor Statistics

was generating an average of 198,000 per month, compared to a robust 260,000 during 2014.

Oddly enough, the unemployment rate held constant at 5.1% during the quarter despite the slowdown in job creation, reaching the lowest rate since April 2008. The reason for the steady unemployment rate is another decline in the labor force; the participation rate is now down to 62.4%, the lowest rate since 1977! One piece of good news is that the broader “U-6” measure of unemployment, which includes people looking for work,

restricted to part-time, or discouraged from finding work, and becoming inactive, fell to 10% in September, down from 11.7% one year earlier. This “underemployment” rate peaked north of 16% in 2010. Focus remains on the unemployment rate since the Fed identified it as a potential trigger for raising interest rates. The 5.1% current rate is now well below the target identified by Fed Chair Janet Yellen, and in fact is at the level at which the Fed last began a cycle of raising interest rates in 2004. The reluctance to raise interest rates comes in part from the argument that the unemployment rate is low for the wrong reasons, i.e., labor force participation suppressed by economic weakness. The reluctance may also reflect hesitancy stemming from a lack of experience—it’s been 11 years since the Fed last embarked on a cycle of raising interest rates! The last time the Fed began such a cycle, the iPhone did not exist, nor did Twitter or YouTube.

Second quarter consumer spending was revised up to 3.6% growth, and came in at 3.2% for the third quarter, clearly one sign of continuing economic strength. However, consumer data during the quarter were mixed. Falling gasoline prices enabled consumers to shift spending elsewhere, and fueled strong demand for cars and light trucks. Countering this good news, the disappointing jobs report in September combined with summertime market volatility dampened consumers’ moods, and consumer sentiment dropped during each month of the quarter.

The dollar keeps climbing, as the U.S. remains the beacon of growth and stability in the turbulence of the global economy. The dollar has seen gains over the past year against both developed and emerging currencies, and against both major trading partners and “other important” trading partners. This currency appreciation, along with weak growth abroad and lower oil

### The Long-Term View

Index	2015 3rd Qtr	Periods ended December 31, 2014			
		Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	-7.25	12.56	15.63	7.94	9.78
S&P 500	-6.44	13.69	15.45	7.67	9.62
Russell 2000	-11.92	4.89	15.55	7.77	9.75
Non-U.S. Equity					
MSCI EAFE	-10.23	-4.90	5.33	4.43	4.31
MSCI Emerging Markets	-17.78	-1.82	2.11	8.78	8.83
S&P Ex-U.S. Small Cap	-7.85	-3.42	8.52	6.84	5.48
Fixed Income					
Barclays Aggregate	1.23	5.97	4.45	4.71	6.49
90-Day T-Bill	0.01	0.03	0.09	1.54	3.24
Barclays Long G/C	2.18	19.31	9.81	7.36	8.49
Citi Non-U.S. Govt	1.71	-2.68	0.85	2.64	6.21
Real Estate					
NCREIF Property	3.09	11.82	12.13	8.38	7.61
FTSE NAREIT Equity	2.00	30.14	16.88	8.31	11.25
Alternatives					
CS Hedge Fund	-2.53	4.13	5.88	5.82	--
Cambridge PE*	--	22.92	17.41	14.02	15.56
Bloomberg Commodity	-14.47	-17.01	-5.53	-1.86	--
Gold Spot Price	-4.83	-1.51	1.55	10.45	4.38
Inflation – CPI-U	-0.29	0.76	1.69	2.12	2.52

\*Private equity data is time-weighted return for period ended December 31, 2014.

Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge

prices (which have sharply reduced U.S. exports of petroleum products), has pulled year-to-date exports down by almost \$1 trillion. While consumer spending remains strong even as confidence is tested by the reappearance of global market volatility, inventory reduction and net exports provided a serious drag to third-quarter GDP growth.

### Recent Quarterly Indicators

Economic Indicators	3Q15	2Q15	1Q15	4Q14	3Q14	2Q14	1Q14	4Q13
Employment Cost–Total Compensation Growth	2.0%	2.0%	2.6%	2.2%	2.2%	2.0%	1.8%	2.0%
Nonfarm Business–Productivity Growth	-0.2%*	3.3%	-1.1%	-2.2%	3.1%	2.8%	-3.5%	3.5%
GDP Growth	1.5%	3.9%	0.6%	2.1%	4.3%	4.6%	-0.9%	3.8%
Manufacturing Capacity Utilization	76.1%	75.9%	75.9%	76.2%	75.7%	75.1%	74.2%	74.2%
Consumer Sentiment Index (1966=100)	90.8	94.2	95.5	89.8	83.0	82.8	80.9	76.9

\*Estimate

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan



# The Home Port is Safest in a Storm

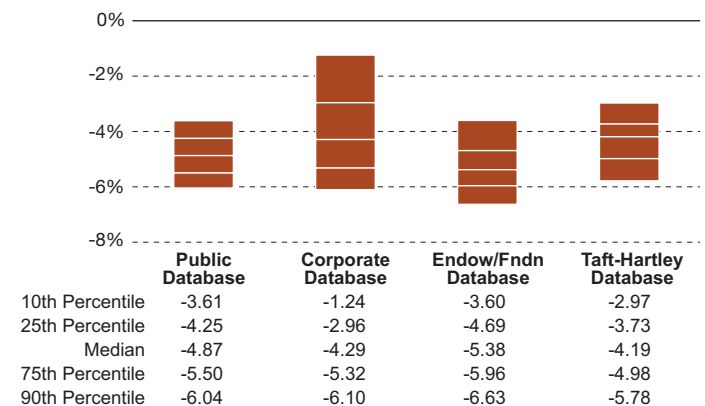
FUND SPONSOR | Kevin Nagy

Equity markets were hammered by concern over China's slowing growth and falling commodity prices during the third quarter, while fixed income markets managed to remain positive despite the global turmoil. More sensitive to China, non-U.S. equity markets (**MSCI ACWI ex USA Index**: -12.10%) suffered more than its U.S. counterpart (**Russell 3000 Index**: -7.25%). U.S. and foreign fixed income stayed in the black, with foreign bonds slightly ahead (**Barclays Aggregate**: +1.23%, **Citi Non-U.S. World Government Bond Index-Unhedged**: +1.71%).

As seen in the Callan Fund Sponsor Quarterly Returns chart, all fund types lost ground. Taft-Hartley (-4.19%) and corporate (-4.29%) plans were the best performers at the median; endowments and foundations (-5.38%) were the worst. Dispersion was widest at the 10th percentile—corporate plans (-1.24%) fared noticeably better than public plans (-3.61%). The bottom decile featured the smallest dispersion: Taft-Hartley (-5.78%) plans suffered but endowment/foundations (-6.63%) were hardest hit.

Differences among the fund types can be partially explained by asset allocations. Taft-Hartley funds benefitted from less exposure to non-U.S. equity and larger real estate allocations

## Callan Fund Sponsor Returns for the Quarter



Source: Callan

versus other fund types. Endowment/foundations were negatively affected by small relative allocations to fixed income and high allocations to volatility-sensitive non-U.S. equity, alternatives, and fund-of-funds. Corporate plans' large U.S. fixed income allocations—perhaps due to liability-driven investments—helped post the best returns in the top quartile.

Taft-Hartley plans continue to be the top performers in the near-to mid-term (+0.76%, +7.49%, and +8.01% for the trailing one-, three-, and five-year time periods, respectively). Corporate

## Callan Database Median and Index Returns\* for Periods ended September 30, 2015

Fund Sponsor	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Public Database	-4.87	-2.54	-0.52	6.91	7.55	5.71
Corporate Database	-4.29	-2.91	-0.61	6.31	7.55	5.91
Endowments/Foundations Database	-5.38	-3.04	-1.84	6.43	7.03	5.56
Taft-Hartley Database	-4.19	-1.53	0.76	7.49	8.01	5.46
Diversified Manager	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Asset Allocator Style	-4.15	-3.12	0.39	7.02	7.84	5.99
U.S. Balanced Database	-5.84	-3.86	-1.82	7.24	8.06	5.64
Global Balanced Database	-5.77	-4.01	-2.91	4.37	5.46	5.44
60% Russell 3000 + 40% Barclays Agg	-3.86	-2.78	0.98	8.22	9.42	6.43
60% MSCI World + 40% Barclays Gbl Agg	-4.73	-4.41	-4.23	4.49	5.40	4.60

\*Returns less than one year are not annualized.

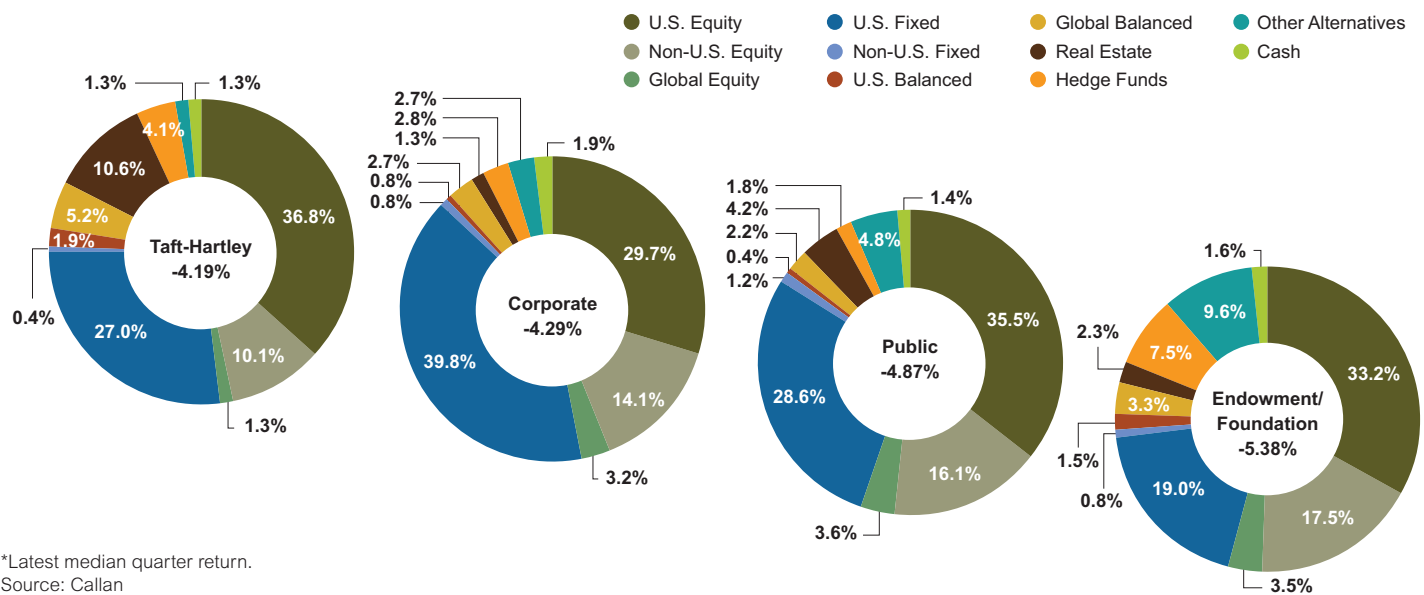
Sources: Callan, Barclays, MSCI, Russell Investment Group

funds retained the lead in the 10-year period (+5.91%). Public funds (-2.54% year-to-date) struggled in the most recent quarter and trailed Taft-Hartley funds (-1.53% year-to-date). Poor hedge fund and other alternatives' performance contributed to endowment/foundations' poor showing across all time periods.

A 60% Russell 3000 + 40% Barclays Aggregate (-3.86%) Benchmark has outperformed the 60% MSCI World + 40%

Barclays Global Aggregate Benchmark (-4.73%) in every time period shown going back for 15 years. Superior U.S. equity returns and a strong dollar have been the main drivers of U.S. vs. non-U.S. dominance. The story is similar among Callan's balanced manager database groups—the *Callan U.S. Balanced* group (-5.84%) outperformed the *Global Balanced* group (-5.77%) in every period except the most recent quarter.

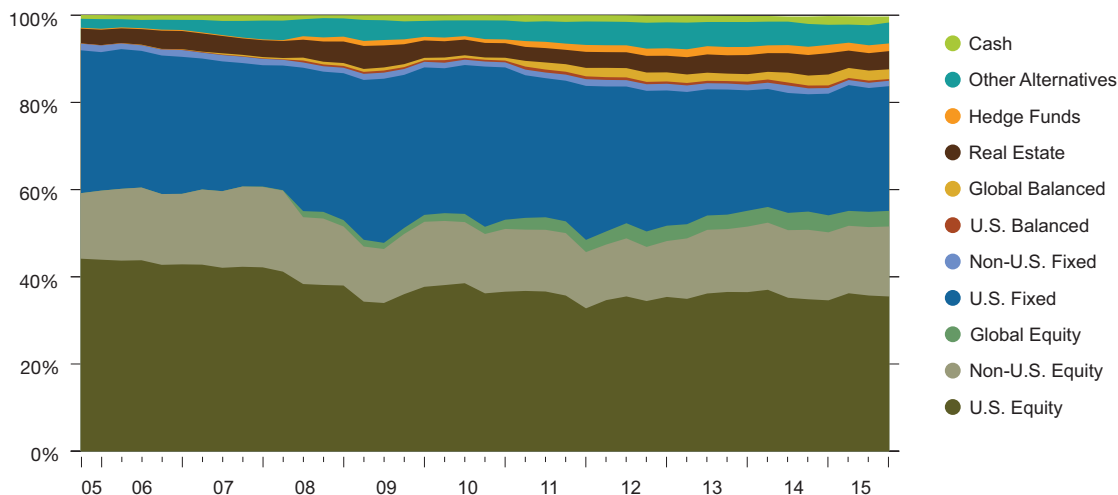
### Callan Fund Sponsor Average Asset Allocation



\*Latest median quarter return.  
Source: Callan

### Callan Public Fund Database Average Asset Allocation

(10 Years)



Source: Callan

# Nosedive

## U.S. EQUITY | Lauren Mathias, CFA

The first negative quarter for U.S. equities since 2012 had a seemingly solid start, but took a nosedive in August and September. Macroeconomic issues drove the sullen results, including China's weakening economy, the Fed's delay of interest rate increases, and commodity price declines. The U.S. economy is exhibiting some vigor—consumer confidence remained high and fueled spending; employment showed strength with record-low jobless claims; and housing appeared solid with new home sales at healthy levels. Energy prices impacted the environment negatively and positively—commodity-related companies felt pain while consumers felt wealthier.

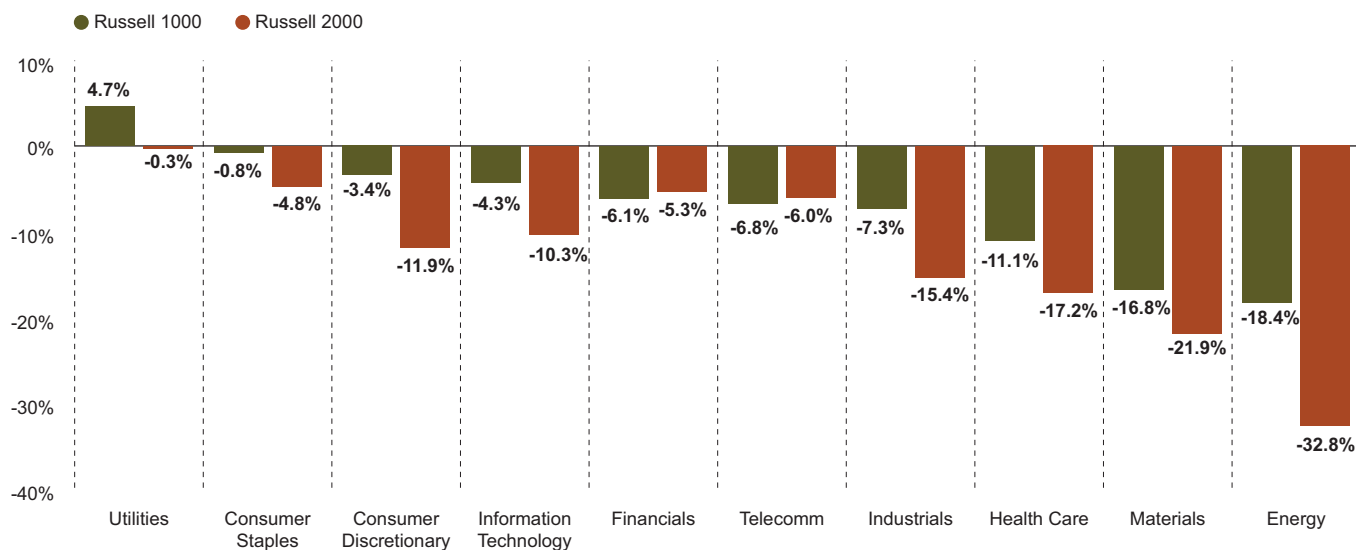
Underlying U.S. fundamentals were impacted by tough global markets. The strong U.S. dollar challenged domestic companies' ability to grow, negatively affecting earnings and expectations going forward. Volatility of stocks, as measured by the daily VIX, peaked for the year in August and remained elevated throughout the quarter. At the same time, stock correlations also increased to almost two times their long-term

average, making it more challenging for active managers to navigate the decline. Asset flows continued to show a preference for passive, which remains a sizable portion of U.S. equity assets under management.

Large and small cap stocks showed strong divergence in returns (**Russell 2000 Index**: -11.92% and **Russell 1000 Index**: -6.83%) while mid cap fell in between (**Russell Midcap Index**: -8.01%). Growth maintained its lead over value in most capitalizations, but small cap stocks were an exception (**Russell 2000 Growth Index**: -13.06% and **Russell 2000 Value Index**: -10.73%). Micro caps fared the worst (**Russell Microcap Index**: -13.77%).

Sector-wise, large cap Utilities alone escaped the shock, and Health Care, Materials, and Energy bore the brunt, particularly in small cap. The magnitude of Health Care underperformance was stronger in small cap due to biotechnology, resulting in small cap growth trailing value; the opposite was true in large

## Economic Sector Quarterly Performance

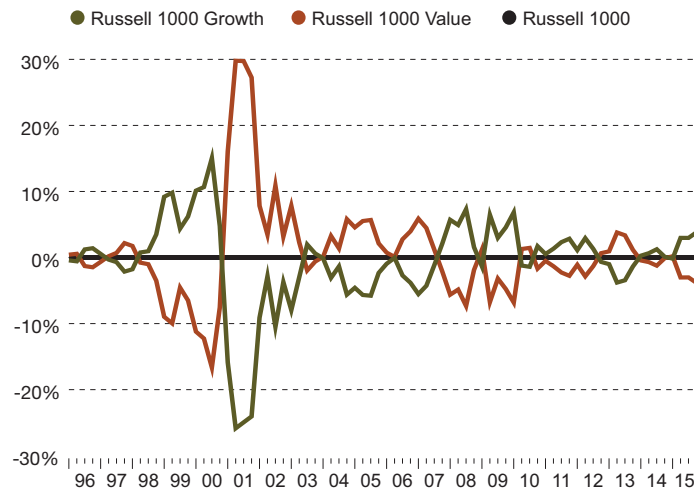


Source: Russell Investment Group

cap. In general, defensive areas of the market held up as investors shifted to a risk-off mentality. Commodity price declines and slow global growth were major factors behind Materials and Energy results. As is typical in high-volatility periods, large cap outperformed small and high quality beat low.

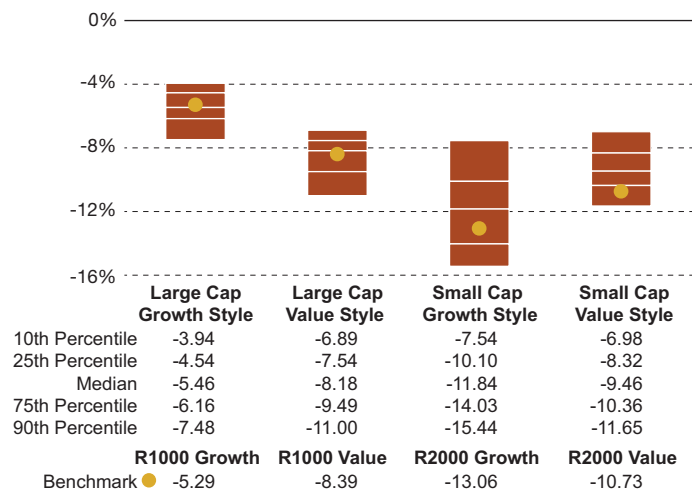
The U.S. equity market experienced an incredibly difficult quarter, but a few positive glimmers shone through: second-quarter GDP was revised up to 3.9%, consumer spending increased, and unemployment was at its lowest level since 2008. Though active management struggled versus the benchmarks, year-to-date results are favorable. The U.S. continues to be the best house in the global economy's neighborhood.

### Rolling One-Year Relative Returns (vs. Russell 1000)



Source: Russell Investment Group

### Callan Style Group Quarterly Returns



Sources: Callan, Russell Investment Group

### U.S. Equity Index Characteristics as of September 30, 2015

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Cap Range Min (\$mm)	1,163	8	175	175	8	8
Cap Range Max (\$bn)	629.01	635.44	635.44	26.32	13.44	5.03
Number of Issues	503	2,981	1,025	824	2,470	1,952
% of Russell 3000	79%	100%	92%	28%	18%	8%
Wtd Avg Mkt Cap (\$bn)	119.30	97.52	105.74	11.49	3.87	1.78
Price/Book Ratio	2.5	2.4	2.5	2.3	2.0	1.9
Forward P/E Ratio	15.1	15.7	15.5	17.1	17.4	18.1
Dividend Yield	2.3%	2.2%	2.2%	1.9%	1.7%	1.6%
5-Yr Earnings (forecasted)	10.6%	11.3%	11.1%	11.9%	12.6%	13.7%

Sources: Russell Investment Group, Standard & Poor's

## U.S. EQUITY (Continued)

### Callan Style Median and Index Returns\* for Periods ended September 30, 2015

Large Cap Equity	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Large Cap Core Style	-6.80	-4.93	-0.30	12.96	13.59	7.34
Large Cap Growth Style	-5.46	-1.12	3.94	13.76	13.91	8.17
Large Cap Value Style	-8.18	-7.89	-3.76	12.29	12.63	6.65
Aggressive Growth Style	-6.60	-0.72	4.11	13.80	13.16	8.65
Contrarian Style	-8.77	-8.50	-4.60	11.97	12.20	6.20
Yield-Oriented Style	-7.96	-9.32	-5.04	9.97	11.56	6.70
Russell 3000	-7.25	-5.45	-0.49	12.53	13.28	6.92
Russell 1000	-6.83	-5.24	-0.61	12.66	13.42	6.95
Russell 1000 Growth	-5.29	-1.54	3.17	13.61	14.47	8.09
Russell 1000 Value	-8.39	-8.96	-4.42	11.59	12.29	5.71
S&P Composite 1500	-6.69	-5.23	-0.30	12.43	13.30	6.93
S&P 500	-6.44	-5.29	-0.61	12.40	13.34	6.80
NYSE	-8.74	-7.88	-6.17	8.77	10.59	6.04
Dow Jones Industrials	-6.98	-6.95	-2.11	9.26	11.38	7.17
Mid Cap Equity	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Mid Cap Core Style	-6.99	-2.54	1.73	14.72	14.56	8.64
Mid Cap Growth Style	-8.28	-2.58	2.79	13.38	13.21	8.77
Mid Cap Value Style	-8.49	-6.13	-0.63	13.86	13.26	8.31
Russell Midcap	-8.01	-5.84	-0.25	13.91	13.40	7.87
S&P MidCap 400	-8.50	-4.66	1.40	13.12	12.93	8.25
Small Cap Equity	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Small Cap Core Style	-10.08	-4.39	3.61	13.92	14.36	7.90
Small Cap Growth Style	-11.84	-3.91	4.15	12.74	13.94	8.19
Small Cap Value Style	-9.46	-6.22	1.68	12.65	13.06	7.69
Russell 2000	-11.92	-7.73	1.25	11.02	11.73	6.55
S&P SmallCap 600	-9.27	-5.49	3.81	13.02	14.04	7.65
NASDAQ	-7.09	-1.61	4.00	15.54	15.72	9.10
Smid Cap Equity	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Smid Cap Broad Style	-10.48	-4.30	1.89	13.10	13.52	8.62
Smid Cap Growth Style	-10.98	-2.54	2.08	13.03	13.97	8.63
Smid Cap Value Style	-9.96	-6.34	0.36	12.43	12.31	8.15
Russell 2500	-10.30	-5.98	0.38	12.39	12.69	7.40
S&P 1000	-8.73	-4.90	2.12	13.11	13.28	8.05
Russell 3000 Sectors	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Consumer Discretionary	-4.17	1.68	10.68	18.19	18.63	9.68
Consumer Staples	-0.92	-1.34	6.97	12.88	14.41	10.37
Energy	-18.99	-22.33	-32.51	-5.01	2.94	2.26
Financials	-6.04	-5.66	1.71	14.52	11.57	0.68
Health Care	-11.64	-1.52	6.91	20.49	19.54	10.40
Industrials	-8.08	-10.05	-3.78	13.33	12.51	7.23
Information Technology	-4.77	-2.98	2.26	12.57	13.82	8.68
Materials	-17.26	-17.24	-17.89	4.00	6.68	6.98
Telecommunications	-6.77	-3.45	-7.22	2.40	8.51	6.54
Utilities	4.20	-6.82	5.28	9.88	11.04	6.72

\*Returns less than one year are not annualized.

Sources: Callan, Dow Jones & Company, Russell Investment Group, Standard & Poor's, The NASDAQ Stock Market

# Stumbling Dragon

NON-U.S. EQUITY | Kevin Nagy

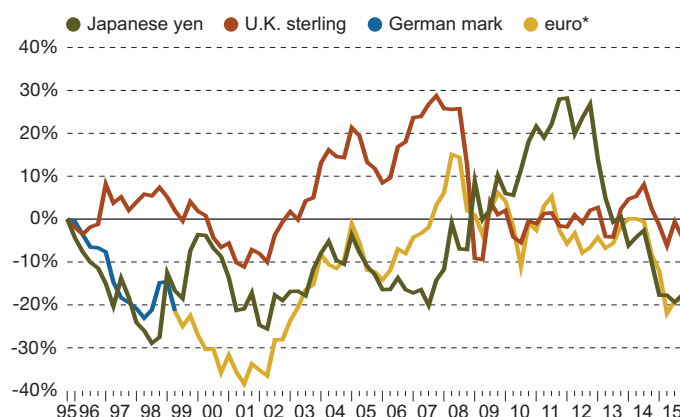
Non-U.S. markets were pummeled in the third quarter (**MSCI ACWI ex USA Index**: -12.10%), as concerns over China's growth convinced many investors to take a risk-off approach. Fears about China's slowdown came to a head in August when Chinese monetary authorities unexpectedly devalued the renminbi. Attempts to dampen the ensuing volatility were not enough to prevent knock-on effects spreading throughout the world.

The pain was felt by both developed (**MSCI World ex USA Index**: -10.57%) and emerging markets (**MSCI Emerging Markets Index**: -17.78%). Value lagged growth as the **MSCI ACWI ex USA Growth** (-10.73%) bested the **MSCI ACWI ex USA Value** (-13.50%). Small cap stocks rode the wave of volatility better than large cap due to less exposure to Energy, but were still deep in the red (**MSCI ACWI ex USA Small Cap Index**: -10.02%). In developed countries defensive sectors fared best, with Consumer Staples (-1.49%), Utilities (-4.23%), and Health Care (-5.26%) providing the most protection. Materials (-19.67%) and Energy (-16.83%), bludgeoned by falling commodity prices, were the worst performers.

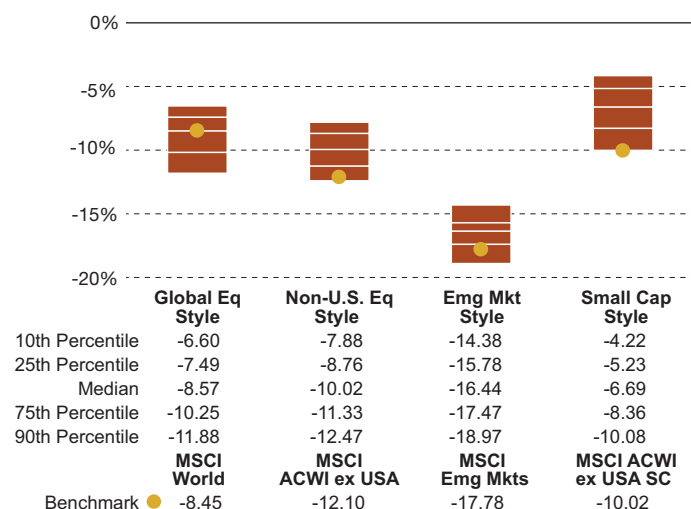
European stocks regressed (**MSCI Europe Index**: -8.69%) as hand wringing over a possible "Grexit" abated only to be replaced by turmoil in China. Denmark (-2.41%) did best, due primarily to strong domestic performance from Consumer Discretionary (+8.54%). Nearby Norway was crippled by falling oil prices and posted the largest loss (-19.13%). European sectors mirrored the story in the rest of the developed world, with Energy and Materials (-15.80% and -19.91%, respectively) suffering the biggest losses.

Southeast Asia and the Pacific (**MSCI Pacific ex Japan Index**: -15.97%) trailed Europe and rest of the world. Singapore (-19.48%), Hong Kong (-16.16%), and Australia (-15.33%) felt the full force of China's volatility. Australian Energy firms were hit hard by falling oil prices and sagging demand in China. Japan's economy shrunk by 1.2% on an annualized basis

## Major Currencies' Cumulative Returns (vs. U.S. Dollar)



## Callan Style Group Quarterly Returns



in the second quarter and inflation remained well below the Bank of Japan's two percent target (**MSCI Japan**: -11.80%). Japanese carmakers were hurt by reports of slowing sales in China; a massive explosion at the port of Tianjin in August temporarily shut down Toyota's largest Chinese production facility. Energy and Materials were laggard sectors in the Index

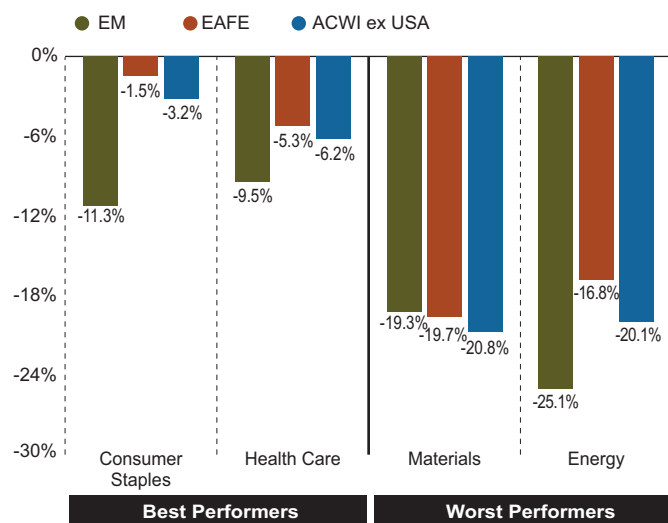
## NON-U.S. EQUITY (Continued)

(-28.24% and -19.35%, respectively). Financials (-17.73%) followed as Japanese banks were battered by large losses in their equity portfolios.

Emerging markets were hit hardest in this broad downturn, with the **MSCI Emerging Markets Index** dropping 17.78%. China was the main story for much of the quarter after a surprise devaluation of the renminbi in August sparked fears that the slowdown in growth was worse than expected. China's central bank tried to curb the ensuing market turbulence by cutting interest rates, but met limited success. Specific to China, only the Telecomm (-9.20%) sector avoided double-digit losses; Energy (-31.19%), Materials (-27.11%), and Financials (-26.92%) all lost more than a quarter of their value. The ripple effects were felt throughout Asia: Indonesia (-24.19%), Malaysia (-18.23%), and Thailand (-17.51%) all declined sharply. A strong devaluation of local currencies contributed to the general slowdown, as the Malaysian ringgit and Indonesian rupiah both fell to their lowest levels versus the dollar in more than 15 years. Emerging countries outside of Asia were also affected by the strengthening U.S. dollar and

falling commodity prices. Brazilian equities lost over 30% (**MSCI Brazil**: -33.56%) amid a corruption scandal involving the state-run energy company Petrobras, a 22% devaluation of the real, and a downgrade of the country's credit rating to below investment grade by Standard & Poor's.

### Quarterly Returns: Strong and Struggling Sectors

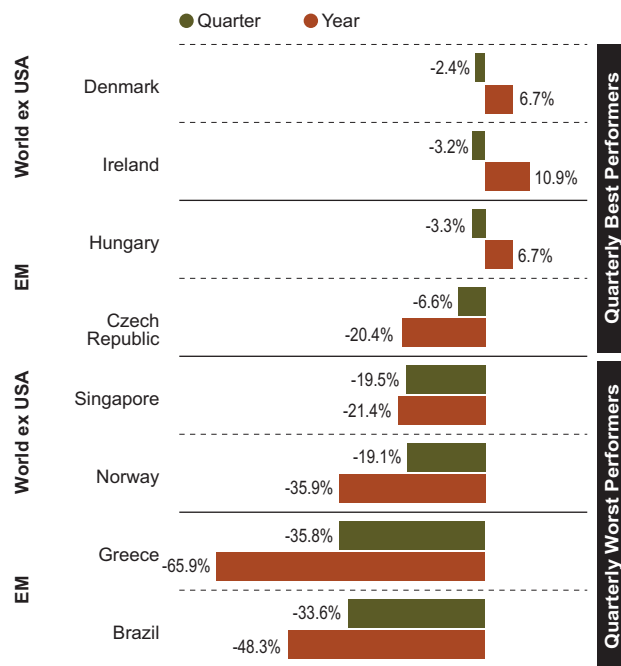


### Quarterly Return Attribution for EAFE (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	-15.33%	-7.33%	-8.63%	6.42%
Austria	-8.99%	-9.16%	0.18%	0.18%
Belgium	-7.85%	-8.02%	0.18%	1.33%
Denmark	-2.41%	-2.59%	0.18%	1.83%
Finland	-5.54%	-5.71%	0.18%	0.87%
France	-6.45%	-6.62%	0.18%	10.07%
Germany	-10.89%	-11.05%	0.18%	8.85%
Hong Kong	-16.16%	-16.18%	0.03%	3.02%
Ireland	-3.16%	-3.34%	0.18%	0.40%
Israel	-5.55%	-1.73%	-3.89%	0.63%
Italy	-4.36%	-4.53%	0.18%	2.57%
Japan	-11.80%	-13.68%	2.17%	22.52%
Netherlands	-8.90%	-9.07%	0.18%	2.80%
New Zealand	-7.06%	-1.74%	-5.41%	0.14%
Norway	-19.13%	-12.32%	-7.77%	0.58%
Portugal	-11.55%	-11.71%	0.18%	0.15%
Singapore	-19.48%	-15.06%	-5.30%	1.27%
Spain	-11.12%	-11.28%	0.18%	3.45%
Sweden	-9.16%	-8.18%	-1.07%	2.95%
Switzerland	-6.97%	-2.73%	-4.35%	9.68%
U.K.	-10.02%	-6.58%	-3.68%	20.30%

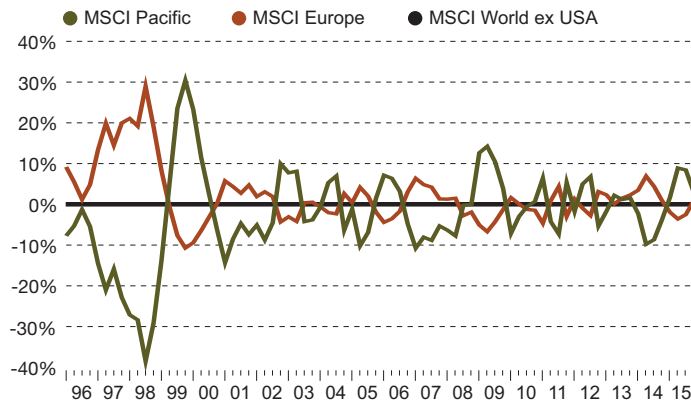
Sources: MSCI, Russell Investment Group, Standard & Poor's.

### Quarterly and Annual Country Performance Snapshot





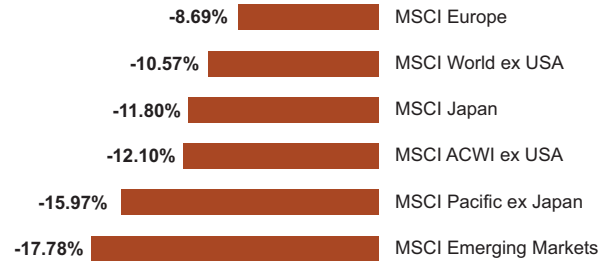
## Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

## Regional Quarterly Performance

(U.S. Dollar)



Source: MSCI

## Style Median and Index Returns\* for Periods ended September 30, 2015

Non-U.S. Equity	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Non-U.S. Equity Style</b>	<b>-10.02</b>	<b>-4.05</b>	<b>-6.86</b>	<b>6.31</b>	<b>5.02</b>	<b>4.24</b>
MSCI EAFE	-10.23	-5.28	-8.66	5.63	3.98	2.97
MSCI EAFE (local)	-8.98	-0.95	0.80	12.71	7.71	3.30
MSCI ACWI ex USA	-12.10	-8.28	-11.78	2.78	2.27	3.49
MSCI ACWI ex USA Growth	-10.73	-5.67	-7.79	3.99	3.08	3.99
MSCI ACWI ex USA Value	-13.50	-10.93	-15.72	1.53	1.42	2.94
<b>Global Equity</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Global Equity Style</b>	<b>-8.57</b>	<b>-5.01</b>	<b>-3.51</b>	<b>9.59</b>	<b>8.87</b>	<b>5.85</b>
MSCI World	-8.45	-6.04	-5.09	8.58	8.29	4.73
MSCI World (local)	-7.72	-3.90	-0.78	11.86	10.00	4.77
MSCI ACWI	-9.34	-6.65	-6.16	7.52	7.39	5.14
<b>Regional Equity</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
MSCI Europe	-8.69	-5.20	-9.33	6.03	4.28	3.31
MSCI Europe (local)	-6.99	-0.25	-0.25	10.09	6.91	3.88
MSCI Japan	-11.80	0.21	-2.22	8.96	4.91	1.14
MSCI Japan (local)	-13.68	0.10	6.76	25.81	12.75	1.70
MSCI Pacific ex Japan	-15.97	-15.48	-16.77	-2.00	0.87	5.15
MSCI Pacific ex Japan (local)	-10.74	-6.50	-3.68	6.87	4.99	5.32
<b>Emerging/Frontier Markets</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Emerging Market Style</b>	<b>-16.44</b>	<b>-14.62</b>	<b>-17.72</b>	<b>-3.58</b>	<b>-2.56</b>	<b>5.29</b>
MSCI Emerging Markets	-17.78	-15.22	-18.98	-4.93	-3.25	4.60
MSCI Emerging Markets (local)	-11.97	-6.86	-6.79	2.45	2.09	6.91
MSCI Frontier Markets	-10.57	-13.39	-24.19	6.28	2.16	-1.96
<b>Non-U.S. Small Cap Equity</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Non-U.S. Small Cap Style</b>	<b>-6.69</b>	<b>3.39</b>	<b>1.29</b>	<b>11.71</b>	<b>9.47</b>	<b>6.87</b>
MSCI World ex USA Small Cap	-8.03	-0.34	-3.71	7.48	5.74	4.23
MSCI ACWI ex USA Small Cap	-10.02	-2.54	-6.42	5.51	3.85	5.11
MSCI Emerging Market Small Cap	-16.67	-9.80	-15.23	-1.09	-2.43	6.79

\*Returns less than one year are not annualized.

Sources: Callan, MSCI



# A Little Longer to Liftoff

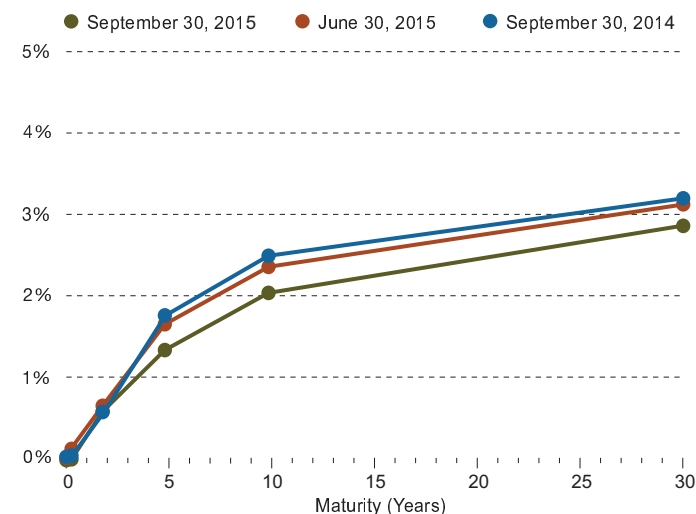
U.S. FIXED INCOME | Kevin Machiz, CFA, FRM

Interest rates moved lower in the third quarter amid a broad-based flight to quality—apprehension over China's economy and commodity prices appeared to be the primary sources of concern. The yield curve flattened significantly as yield spreads widened across non-Treasury sectors and the **Barclays Aggregate Index** rose 1.23%.

The U.S. economy expanded at a moderate pace with the support of fixed investment by businesses, household spending, and the jobs market. Inflation nevertheless remained below the Fed's two percent target.

While many market participants previously pointed to the Fed's September meeting as a likely date for interest rate hikes, the Fed once again pegged the federal funds and discount rates at 0.00%–0.25% and 0.75%, respectively. The Fed cited global economic and financial developments as concerns. The Fed mentioned, and Chair Yellen reiterated in a subsequent speech, that market-based measures of inflation expectations had declined.

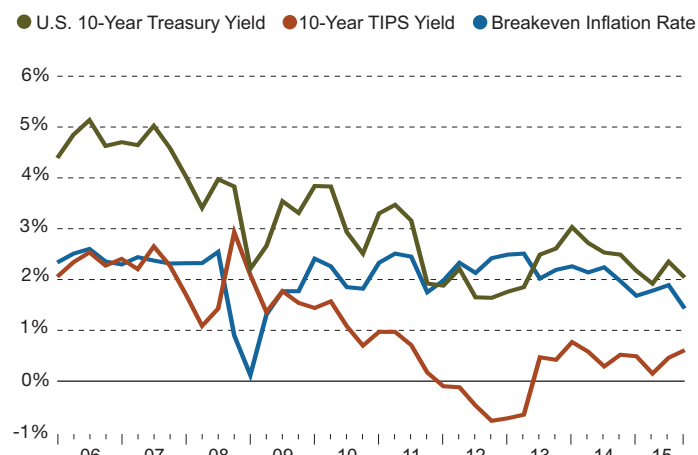
## U.S. Treasury Yield Curves



Source: Bloomberg

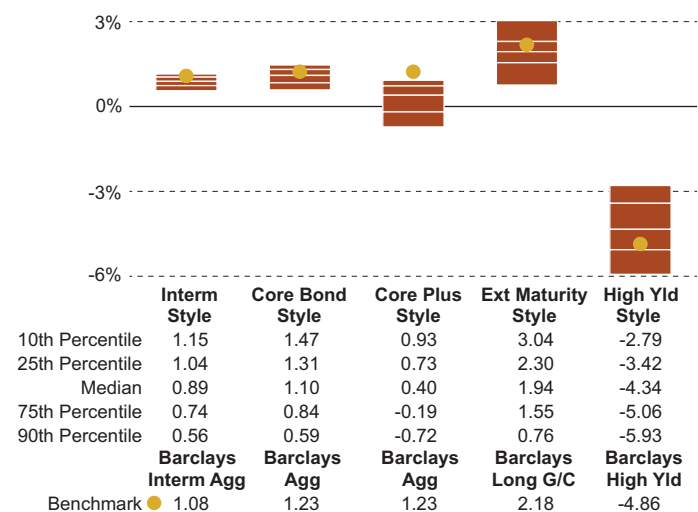
The 10-year U.S. Treasury yield decreased 32 bps. Yields on longer-term bonds decreased by a similar amount. The market's expectation for the first hike in the fed funds rate was pushed back to March 2016. The breakeven inflation rate (the difference between nominal and real yields) on the 10-year Treasury decreased significantly (47 bps) to 1.43%, as Treasury Inflation-Protected Securities underperformed nominal Treasuries.

## Historical 10-Year Yields



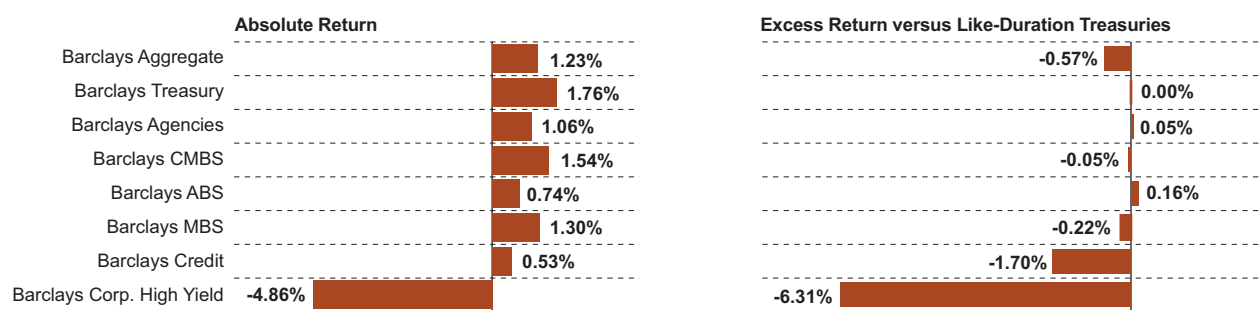
Source: Bloomberg

## Callan Style Group Quarterly Returns



Sources: Barclays, Callan

## Fixed Income Index Quarterly Returns

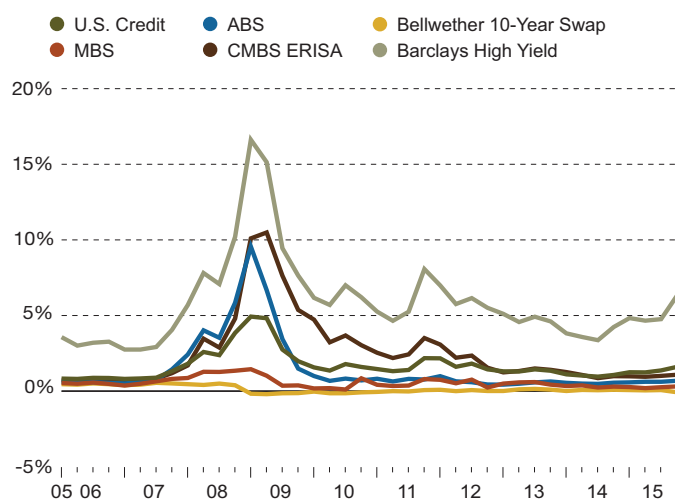


Source: Barclays

Non-Treasury sectors broadly underperformed like-duration Treasuries. Credit was among the worst as Financials, Industrials, and Utilities lagged by 0.30%, 2.14%, and 1.01% respectively. Within Industrials, Energy and Metals & Mining companies were hit hardest, trailing like-duration Treasuries by 4.97% and 9.45%, respectively. Mortgage-backed securities (MBS) (-0.22%) and Commercial MBS (-0.05%) also struggled. Asset-backed securities beat like-duration Treasuries by 0.16%.

High yield corporate bonds also performed poorly. The **Barclays Corporate High Yield Index** ended in the red (-4.86%). New issue activity is on pace with the previous three calendar years. Year-to-date, there was approximately \$224 billion in new issuance of high yield bonds, down from \$246 billion over the same period in 2014.

## Effective Yield Over Treasuries



Source: Barclays

## U.S. Fixed Income Index Characteristics as of September 30, 2015

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity	% of Barclays G/C	% of Barclays Agg
Barclays Aggregate	2.31	5.60	7.86		100.00%
Barclays Govt/Credit	2.19	6.22	8.45	100.00%	69.12%
Intermediate	1.69	3.97	4.31	79.20%	54.74%
Long-Term	4.09	14.77	24.22	20.80%	14.38%
Barclays Govt	1.36	5.65	6.92	57.08%	39.46%
Barclays Credit	3.29	6.98	10.49	42.92%	29.66%
Barclays MBS	2.61	4.20	6.69		28.36%
Barclays ABS	1.47	2.42	2.58		0.57%
Barclays CMBS	2.45	4.82	5.39		1.89%
Barclays Corp High Yield	8.04	4.39	6.25		

Source: Barclays

## U.S. FIXED INCOME (Continued)

### Callan Style Median and Index Returns\* for Periods ended September 30, 2015

<b>Broad Fixed Income</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Core Bond Style</b>	<b>1.10</b>	<b>1.29</b>	<b>3.00</b>	<b>2.05</b>	<b>3.61</b>	<b>5.10</b>
<b>Core Bond Plus Style</b>	<b>0.40</b>	<b>0.70</b>	<b>2.19</b>	<b>2.38</b>	<b>4.22</b>	<b>5.48</b>
Barclays Aggregate	1.23	1.13	2.94	1.71	3.10	4.64
Barclays Govt/Credit	1.20	0.90	2.73	1.59	3.09	4.61
Barclays Govt	1.71	1.79	3.68	1.30	2.47	4.27
Barclays Credit	0.53	-0.26	1.50	2.02	4.09	5.28
Citi Broad Investment Grade	1.12	1.06	2.85	1.67	3.06	4.72
<b>Long-Term</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Extended Maturity Style</b>	<b>1.94</b>	<b>-2.59</b>	<b>2.85</b>	<b>2.70</b>	<b>6.50</b>	<b>7.13</b>
Barclays Long Govt/Credit	2.18	-2.39	3.09	2.17	5.96	6.65
Barclays Long Govt	4.97	0.22	8.62	2.78	6.18	6.92
Barclays Long Credit	0.52	-3.93	-0.03	1.87	5.84	6.35
Citi Pension Discount Curve	3.23	-3.77	4.15	2.22	8.08	7.85
<b>Intermediate-Term</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Intermediate Style</b>	<b>0.89</b>	<b>1.73</b>	<b>2.70</b>	<b>1.65</b>	<b>2.78</b>	<b>4.66</b>
Barclays Intermediate Aggregate	1.08	1.73	2.95	1.64	2.69	4.37
Barclays Intermediate Govt/Credit	0.95	1.77	2.68	1.45	2.42	4.17
Barclays Intermediate Govt	1.21	2.03	3.00	1.10	1.88	3.85
Barclays Intermediate Credit	0.54	1.36	2.17	2.09	3.47	4.91
<b>Short-Term</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Defensive Style</b>	<b>0.34</b>	<b>1.14</b>	<b>1.39</b>	<b>1.05</b>	<b>1.45</b>	<b>3.14</b>
<b>Active Duration Style</b>	<b>1.11</b>	<b>1.52</b>	<b>2.71</b>	<b>1.73</b>	<b>3.05</b>	<b>4.72</b>
Money Market Funds (net of fees)	0.00	0.01	0.01	0.01	0.01	1.25
ML Treasury 1–3-Year	0.31	0.98	1.16	0.67	0.76	2.54
90-Day Treasury Bills	0.01	0.02	0.02	0.06	0.08	1.33
<b>High Yield</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>High Yield Style</b>	<b>-4.34</b>	<b>-1.48</b>	<b>-2.07</b>	<b>4.12</b>	<b>6.47</b>	<b>7.30</b>
Barclays Corporate High Yield	-4.86	-2.45	-3.43	3.51	6.15	7.25
ML High Yield Master	-4.88	-2.51	-3.54	3.42	5.90	7.04
<b>Mortgage/Asset-Backed</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>Mortgage Style</b>	<b>1.26</b>	<b>1.92</b>	<b>3.68</b>	<b>2.39</b>	<b>3.55</b>	<b>5.00</b>
Barclays MBS	1.30	1.61	3.43	1.98	3.03	4.71
Barclays ABS	0.74	1.83	2.38	1.21	2.12	3.41
Barclays CMBS	1.54	2.24	3.72	2.52	4.54	5.39
<b>Municipal</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
Barclays Muni	1.65	1.77	3.16	2.88	4.14	4.64
Barclays Muni 1–10-Year	1.32	1.64	2.22	2.07	3.00	4.05
Barclays Muni 3-Year	0.80	1.19	1.07	1.24	1.66	3.04
<b>TIPS</b>	<b>Quarter</b>	<b>3 Quarters</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
Barclays TIPS Full Duration	-1.15	-0.80	-0.83	-1.83	2.55	4.01
Barclays TIPS 1-10 Year	-0.86	0.18	-0.82	-1.39	1.79	3.56

\*Returns of less than one year are not annualized.

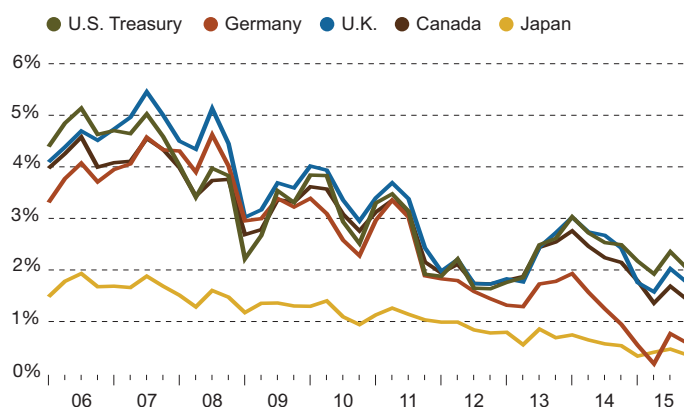
Sources: Barclays, Callan, Citigroup, Merrill Lynch

# Red Scare

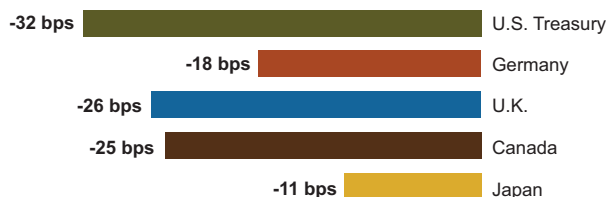
## NON-U.S. FIXED INCOME | Kyle Fekete

Developed sovereign bonds performed well relative to U.S. bonds as interest rates fell due to mounting concerns over a slowing global economy. The **Citi Non-U.S. World Government Bond Index** earned 1.71% for the quarter, but is down 4.22% year-to-date. Hedged in U.S. dollars, the Index is up 1.97%, outperforming the unhedged investors primarily due to broad-based weakness against the U.S. dollar. The “safe-haven” German bund gained nearly 2% with the yield finishing at 0.58%. Energy-related currency weakness in Canada and Australia translated into disappointing returns on an unhedged basis (both down 6%). The Canadian economy shrank for two straight quarters—officially a recession. Italy was the best performer in the Index, expanding more than 4% on both a hedged and unhedged basis.

### 10-Year Global Government Bond Yields



### Change in 10-Year Yields from 2Q15 to 3Q15



Source: Bloomberg

In August, China’s surprise change in exchange-rate policy heightened risk aversion and piled onto the already strong headwinds facing emerging market bonds. Slowing demand from China, falling commodity prices, capital outflows, and worries over a Fed hike all contributed to poor performance. The **JPM EMBI Global Diversified Index** slipped by 1.71%. Emerging market currencies were particularly hard hit, as the local currency-denominated **JPM GBI-EM Global Diversified Index** sank 10.54%—the worst quarterly performance since late 2011.

The emerging Americas exhibited the highest increase in yields. Brazil, suffering from the sharp drop in oil prices, as well as fiscal and political challenges, was downgraded by S&P to junk

### Quarterly Return Attribution for Non-U.S. Gov’t Indices (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	-6.19%	2.68%	-8.63%	1.93%
Austria	1.88%	1.70%	0.18%	1.82%
Belgium	2.48%	2.30%	0.18%	2.96%
Canada	-5.93%	1.02%	-6.88%	2.32%
Denmark	1.95%	1.77%	0.18%	0.81%
Finland	1.70%	1.51%	0.18%	0.71%
France	2.13%	1.94%	0.18%	11.55%
Germany	1.96%	1.77%	0.18%	8.92%
Ireland	2.71%	2.52%	0.18%	0.95%
Italy	4.31%	4.11%	0.18%	11.39%
Japan	3.06%	0.87%	2.17%	33.06%
Malaysia	-14.57%	-0.47%	-14.17%	0.50%
Mexico	-6.04%	1.48%	-7.41%	1.16%
Netherlands	1.90%	1.71%	0.18%	2.96%
Norway	-5.71%	2.23%	-7.77%	0.33%
Poland	1.09%	2.21%	-1.10%	0.68%
Singapore	-4.34%	1.02%	-5.30%	0.41%
South Africa	-11.43%	0.89%	-12.22%	0.56%
Spain	3.01%	2.82%	0.18%	6.42%
Sweden	0.45%	1.54%	-1.07%	0.54%
Switzerland	-3.68%	0.71%	-4.35%	0.35%
U.K.	-0.49%	3.32%	-3.68%	9.72%

Source: Citigroup

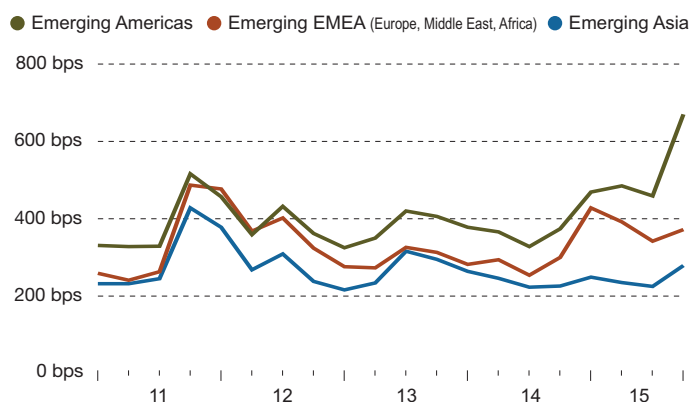
## NON-U.S. FIXED INCOME (Continued)

status; the country has seen its currency decline by roughly 40% over the past year. Brazil (-9.97%) was the most notable underperformer in the dollar-denominated Global Diversified Index. Ukraine surged +50.18% following an agreement with creditors whereby bondholders would take a 20% haircut in return for a portion of future GDP growth, subject to a set formula. Among

local currency bonds, pain was widespread. Brazil (-24.66%), Colombia (-18.05%), Turkey (-14.76%), Malaysia (-14.48%), Indonesia (-14.15%), and Russia (-13.19%), all suffered double-digit declines. The yield on the GBI-EM Global Diversified Index was 7% as of quarter end, with Brazil at 15% and Russia and Turkey both over 10%.

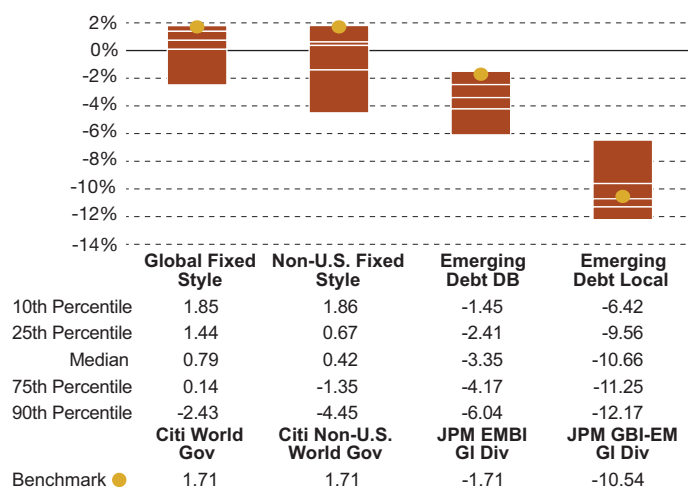
### Emerging Spreads Over Developed

(By Region)



Source: Barclays

### Callan Style Group Quarterly Returns



Sources: Callan, Citigroup, JPMorgan Chase

### Callan Style Median and Index Returns\* for Periods ended September 30, 2015

Global Fixed Income	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Global Style</b>	<b>0.79</b>	<b>-2.30</b>	<b>-3.40</b>	<b>-1.53</b>	<b>1.15</b>	<b>4.32</b>
Citi World Govt	1.71	-2.38	-3.83	-2.85	-0.19	3.37
Citi World Govt (Local)	1.89	1.27	4.01	3.52	3.51	3.77
Barclays Global Aggregate	0.85	-2.25	-3.26	-1.59	0.81	3.71
Non-U.S. Fixed	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Non-U.S. Style</b>	<b>0.42</b>	<b>-5.24</b>	<b>-7.99</b>	<b>-3.54</b>	<b>0.18</b>	<b>3.58</b>
Citi Non-U.S. World Govt	1.71	-4.22	-7.01	-4.59	-1.32	2.92
Citi Non-U.S. World Govt (Local)	1.97	1.04	4.13	4.44	3.95	3.69
European Fixed	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
Citi Euro Govt Bond	2.74	-6.67	-8.12	1.52	1.11	3.76
Citi Euro Govt Bond (Local)	2.55	1.18	3.98	5.80	4.89	4.37
Emerging Markets Fixed	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
JPM EMBI Global Diversified	-1.71	-0.07	-0.62	1.50	4.73	6.89
JPM GBI-EM Global Diversified	-10.54	-14.91	-19.77	-8.72	-3.56	4.45

\*Returns less than one year are not annualized.

Sources: Callan, Citigroup, JPMorgan Chase

## M&A, Here to Stay?

REAL ESTATE | Mike Pritts

The **NCREIF Property Index** advanced 3.09%, recording a 1.22% income return and 1.87% appreciation return. The Index's cash flow return was 0.68% (3.22% for the trailing four quarters). There were 204 asset trades, representing \$7.8 billion of overall transactional volume. This remains ahead of the \$5.0 billion 10-year quarterly transactional average. The peak volume over the prior 10-year period was \$8.7 billion in the second quarter of 2007.

Pricing cooled slightly from the recent capitalization-rate compression trend as equal-weighted transactional capitalization rates increased to 5.91%. This reflects a slight expansion from the second quarter's low. Over the prior cycle, quarterly equal-weighted transactional capitalization rates dipped to a low of 5.46% in the fourth quarter of 2007 and expanded to a peak of 8.46% in the third quarter of 2009. Appraisal capitalization rates decreased from 4.81% to 4.67%. Over the prior cycle, these rates declined to a low of 4.89% (in the third quarter of 2008).

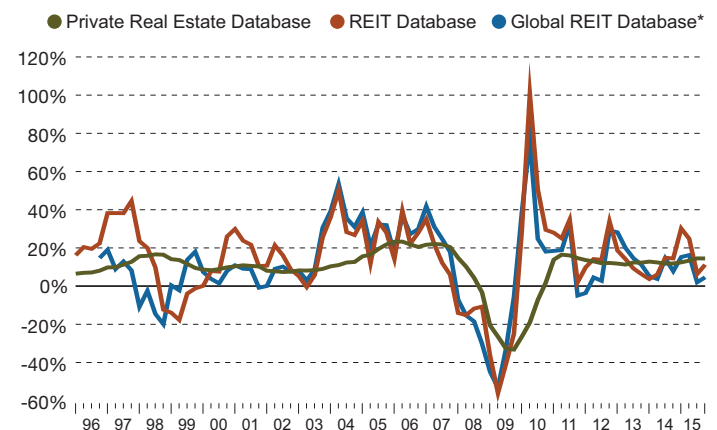
On a preliminary basis, the **NCREIF Open End Diversified Core Equity Index** produced a 3.68% total return, comprising a 1.16% income return and a 2.51% appreciation return. In the listed real estate market, the **FTSE EPRA/NAREIT Developed REITs Index (USD)** declined 1.42% and U.S. REITs tracked by the **FTSE NAREIT Equity REITs Index** increased 2.00%.

In the U.S., sectors were mixed and markets volatile. By sector, Self-Storage (+16.14%) led, followed by Residential (+6.94%), Industrial (+5.00%), Malls (+4.12%), and Health Care (+2.41%); Office (-1.24%), and Lodging (-13.73%) dipped. U.S. REITs raised \$8.6 billion following the completion of eight secondary offerings raising \$1.7 billion, one preferred equity offering raising \$288 million, and 15 unsecured debt offerings raising \$6.7 billion. There were no U.S. REIT IPOs; the quarter had the lowest amount of capital raised by the REIT market since Q4 2011 and the fifth lowest quarterly capital raise since the beginning

of 2009. In large part, 2015 has been dominated by significant M&A activity among a number of large real estate investors driven by inexpensive financing and significant amounts of capital seeking real estate. Notable among the recent deal activity is Blackstone's announced offer to acquire Strategic Hotels and BioMed Realty Trust and, more recently, the announced merger of Starwood Waypoint and Colony American. In the U.S., M&A activity through the third quarter of this year has already exceeded all of 2014.

U.S. REIT indices continued their slide up until the mid-September FOMC meeting where the decision was made not to increase the discount rate. With updated clarity on near-term Fed moves, REIT markets began to appreciate toward the end of the third quarter and into the fourth. Listed real estate beat broad equity markets. A combination of both U.S. economic out-performance and a low interest rate environment continues to make U.S. commercial property an attractive destination for both U.S. and non-U.S. investors. Capital flows have created a \$9 billion investment queue for open-ended core funds as well as a healthy \$74 billion invested in U.S. commercial real estate over the last 12 months.

### Rolling One-Year Returns



\*Global REIT returns from 3Q96  
Source: Callan

## REAL ESTATE (Continued)

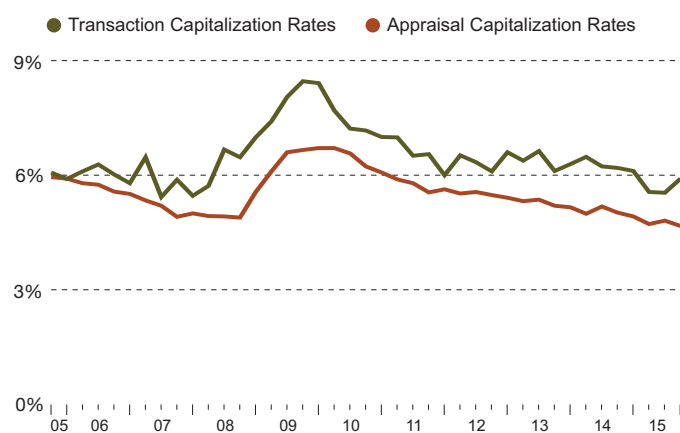
In European core markets, investment activity is returning to crisis countries. Yet the threat of deflation remains given falling global commodity prices and the decline in the euro versus the U.S. dollar. Prime yields in core markets are at very low levels ranging from 2.5% in London to 4.5% in Madrid. Transaction volumes increased as a result of accelerating cross-border global investment into Europe. There is a significant dispersion in prime office rental rates across Europe ranging from €200 (per square meter) in Barcelona, €500 in Paris, all the way up to €1,500 in London's West End.

Asian real estate markets continued to face macro headwinds stemming from contracting industrial activity and slowing export

demand. Despite the pressures, low office vacancy rates within major Asian cities remained the dominant theme. Office buildings in Hong Kong were affected by the lack of new supply and excess demand, pushing rental rates upwards. Tokyo showed improvements in terms of office occupancy rates and accelerating rental growth rates, giving rise to increased pricing power for landlords.

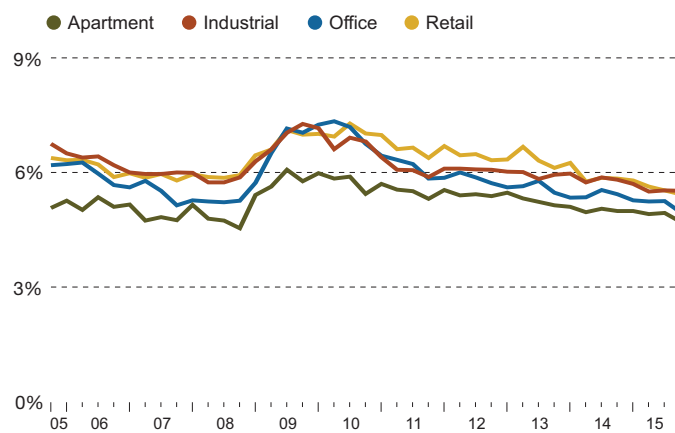
CMBS issuance reached \$23.1 billion, a pull back from the \$27.4 billion issuance volume from the second quarter of 2015 and \$28.1 billion in the third quarter of 2014. Total issuance for the trailing 12 months was \$102.8 billion, a reduction from the recent peak at the end of the second quarter of 2015.

### NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF  
Note: Transaction capitalization rate is equal-weighted.

### NCREIF Capitalization Rates by Property Type



Source: NCREIF  
Note: Capitalization rates are appraisal-based.

### Callan Database Median and Index Returns\* for Periods ended September 30, 2015

Private Real Estate	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Real Estate Database</b> (net of fees)	<b>2.92</b>	<b>10.24</b>	<b>14.12</b>	<b>13.06</b>	<b>13.70</b>	<b>5.55</b>
NCREIF Property	3.09	10.18	13.54	11.92	12.56	8.02
NFI-ODCE (value wtd. net)	3.58	10.67	14.02	12.44	12.98	5.74
Public Real Estate	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>REIT Database</b>	<b>2.63</b>	<b>-2.94</b>	<b>11.38</b>	<b>10.10</b>	<b>12.89</b>	<b>7.88</b>
FTSE NAREIT Equity	2.00	-3.79	9.88	9.59	12.00	6.82
Global Real Estate	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Global REIT Database</b>	<b>-0.73</b>	<b>-3.00</b>	<b>5.16</b>	<b>8.18</b>	<b>9.08</b>	<b>6.38</b>
FTSE EPRA/NAREIT Developed REIT	-1.42	-4.16	3.58	7.05	8.33	5.42

\*Returns less than one year are not annualized.

All REIT returns are reported gross in USD.

Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.



# Public Volatility Private Slowdown

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that new commitments totaled \$53.7 billion with 179 new partnerships formed, down 38% from the second quarter's \$87.1 billion and 231 partnerships formed. With the slowing of commitments and uncertainty caused by the quarter's volatile public stock market, 2015's fundraising will likely be in the vicinity of last year's \$266 million.

According to *Buyouts Insider*, the investment pace by funds into companies totaled 406 transactions, up from 358 deals in the second quarter. The announced aggregate dollar volume fell to \$11.4 billion (from \$24.3 billion). Only one deal with an announced value of more than \$1 billion closed during the quarter, Carlyle-owned CommScope's \$3.1 billion add-on acquisition of Broadband Network Solutions.

According to the National Venture Capital Association, investments in venture capital companies totaled \$16.3 billion in 1,070 rounds of financing. The dollar volume and number of rounds both dropped compared to the second quarter's \$17.5 billion and 1,189 rounds. The largest funding was a \$1.0 billion expansion "mega-round" raised by Social Finance.

Regarding exits, *Buyouts* reports that 123 private M&A exits of buyout-backed companies occurred during the quarter, with 37 deals disclosing values of \$25.5 billion. Both the M&A exit count and announced value was down from the second quarter's 135

## Funds Closed January 1 to September 30, 2015

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	225	26,726	14%
Buyouts	212	129,821	66%
Subordinated Debt	27	8,038	4%
Distressed Debt	32	18,511	9%
Secondary and Other	14	6,385	3%
Fund-of-funds	47	7,496	4%
<b>Totals</b>	<b>557</b>	<b>196,976</b>	<b>100%</b>

Source: Private Equity Analyst

private exits and disclosed value of \$35.8 billion. Buyout-backed IPOs dropped precipitously to four issues floating \$660 million, down from 17 IPOs totaling \$6.6 billion in the second quarter.

Venture-backed M&A exits totaled 90 transactions, with 20 disclosing a dollar volume of \$5.1 billion. The number of exits and disclosed value both increased from the second quarter's 74 sales valued at \$3.7 billion. VC-backed IPOs fell, with 13 offerings raising a combined \$1.7 billion versus the second quarter's 29 IPOs and total issuance of \$3.8 billion.

Please see our upcoming issue of *Private Markets Trends* for additional in-depth coverage.

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of Capital Market Review and other Callan publications.

## Private Equity Performance Database (%)

(Pooled Horizon IRRs through March 31, 2015\*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	3.9	22.4	18.6	17.2	10.9	3.8	27.7
Growth Equity	3.1	10.8	13.0	13.6	12.8	9.7	14.8
All Buyouts	1.3	7.7	13.3	14.3	12.6	10.9	13.1
Mezzanine	-0.1	7.1	10.9	11.2	10.8	7.2	10.0
Distressed	1.6	5.7	12.2	11.4	10.3	11.0	11.3
<b>All Private Equity</b>	<b>2.0</b>	<b>10.1</b>	<b>13.9</b>	<b>14.2</b>	<b>12.0</b>	<b>8.9</b>	<b>14.4</b>
S&P 500 Index	1.0	12.7	16.1	14.5	8.0	4.2	9.4

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson/Cambridge

\*Most recent data available at time of publication



# Drag Me Down

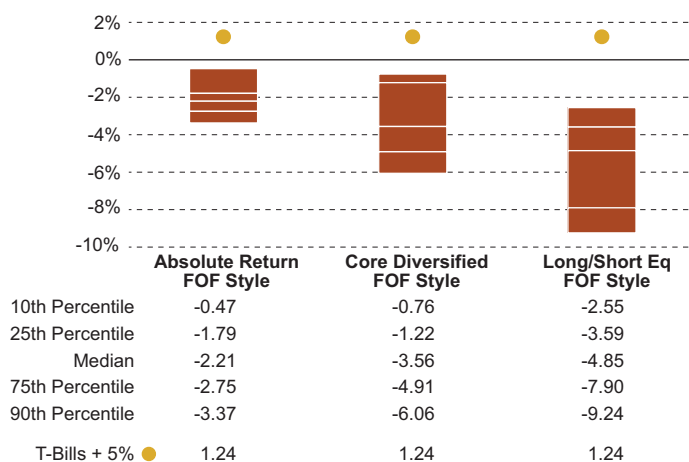
HEDGE FUNDS | Jim McKee

The third quarter was a flood of red ink for capital markets. After a modest rebound in the prior quarter, commodity prices (led by oil) resumed their secular decline, as the **Bloomberg Commodity Index** nosedived 14.48%. Lacking evidence of a global economy on solid ground, equity markets panicked. High yield spreads widened significantly while Treasuries gained during the quarter's flight to quality. Amid this backdrop of anemic global growth, the Federal Reserve balked on raising short-term rates.

As a raw measure of unmanaged hedge fund interests, the **Credit Suisse Hedge Fund Index** (CS HFI) dropped 2.53%. Representing actual hedge fund portfolios, the median manager in the **Callan Hedge Fund-of-Funds Database** slipped 3.30%, net of all fees.

Within the CS HFI, the biggest strategy loser was *Event-Driven Multi-Strategy* (-6.92%). *Distressed* fell 3.52%, but **Barclays High Yield Credit** (-4.86%) dropped further. The average fund in *Long/Short Equity* performed well during the quarter, losing only 1.54% while long-only benchmarks, like the **S&P 500 Index** (-6.44%), fell much more. Relatively free of beta's downside risk, *Equity Market Neutral* rose 2.15%.

## Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Within Callan's Hedge Fund-of-Funds Database, market exposures notably affected performance in the quarter. Hurt badly by the falling stock market, the median *Callan Long/Short Equity FOF* (-4.85%) lagged the *Callan Absolute Return FOF* (-2.21%). With diversifying exposures to both non-directional and directional styles, the *Core Diversified FOF* fell 3.56%.

## Callan Database Median and Index Returns\* for Periods ended September 30, 2015

	Quarter	3 Quarters	Year	3 Years	5 Years	10 Years
<b>Hedge Fund-of-Funds Database</b>	<b>-3.30</b>	<b>-0.72</b>	<b>0.05</b>	<b>5.28</b>	<b>4.29</b>	<b>4.11</b>
CS Hedge Fund Index	-2.53	-0.59	0.11	5.01	4.53	5.16
CS Equity Market Neutral	2.15	1.73	2.07	3.46	2.99	-1.19
CS Convertible Arbitrage	-1.52	1.40	-1.66	2.50	3.53	4.52
CS Fixed Income Arbitrage	-0.19	0.56	0.60	3.59	5.35	3.86
CS Multi-Strategy	0.08	3.32	4.49	7.80	7.52	6.34
CS Distressed	-3.52	-3.61	-5.84	5.78	5.09	5.35
CS Risk Arbitrage	-2.72	-0.39	-2.10	1.63	1.15	3.54
CS Event-Driven Multi-Strategy	-6.92	-4.23	-6.23	4.85	3.01	5.30
CS Long/Short Equity	-1.54	1.94	4.24	8.95	6.13	5.91
CS Dedicated Short Bias	17.40	6.97	4.28	-9.88	-11.10	-8.56
CS Global Macro	-2.95	-0.44	0.02	2.74	4.35	6.92
CS Managed Futures	4.37	0.12	11.40	3.84	2.51	4.27
CS Emerging Markets	-5.57	-2.93	-2.19	3.66	2.67	5.09

\*Returns less than one year are not annualized. Sources: Callan, Credit Suisse

# Staying Afloat

## DEFINED CONTRIBUTION | Tom Szkwarla

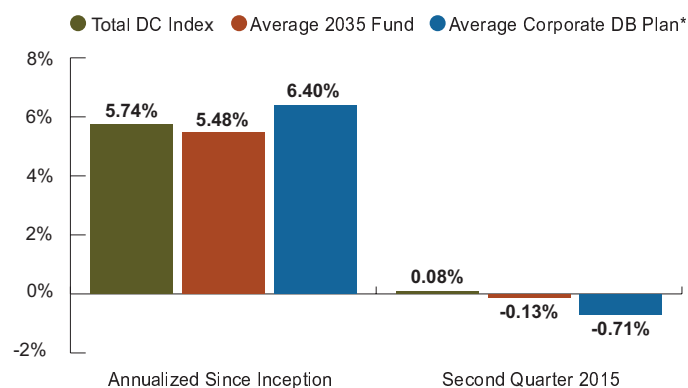
The average defined contribution (DC) plan managed to avoid losses in the second quarter of 2015—but just barely. According to the Callan DC Index™, the typical DC plan ended June 30, 2015, with a 0.08% gain. This placed DC plans on firmer ground than the typical 2035 target date fund (TDF) or corporate defined benefit (DB) plan, which lost 0.13% and 0.71%, respectively.

Plan balances experienced a slight increase (+0.26%) driven primarily by participant inflows. Inflows (i.e., participant and plan sponsor contributions) added 0.18% to total growth, while market appreciation (return-derived growth) contributed the remaining 0.08%. Since inception, plan sponsor and participant contributions have had a significant impact on balances. Thirty percent of total growth in balances (2.49% annualized) has been attributable to such net flows since the Index's 2006 inception.

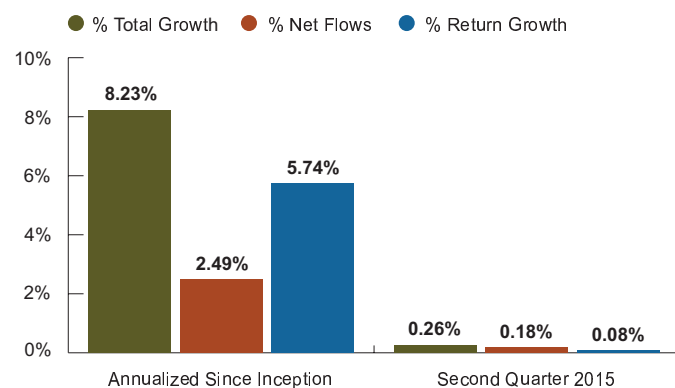
In the first quarter of 2015, TDFs beat out U.S. large cap equity to become the largest holding in the typical DC plan—and their dominance continued to grow in the second quarter. Target date funds accounted for the majority of inflow activity, capturing 70 cents of every dollar moving. Since 2011, TDF cash inflows have averaged just over 70% each quarter, with the highest inflow clocking in at 89% in the second quarter of 2014.

*The Callan DC Index™ is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.*

## Investment Performance\*



## Growth Sources\*



## Net Cash Flow Analysis (Second Quarter 2015)\* (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	70.45%
Non-U.S. Equity	13.11%
Company Stock	-27.86%
U.S. Large Cap	-49.44%
Total Turnover**	0.32%

Source: Callan DC Index

\*Notes: DC Index inception date is January 2006. DB plan performance is gross of fees. Data provided here is the most recent available at time of publication.

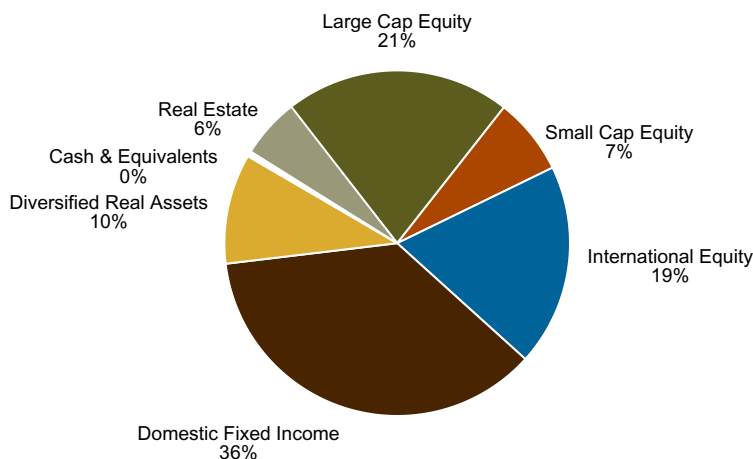
\*\*Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.



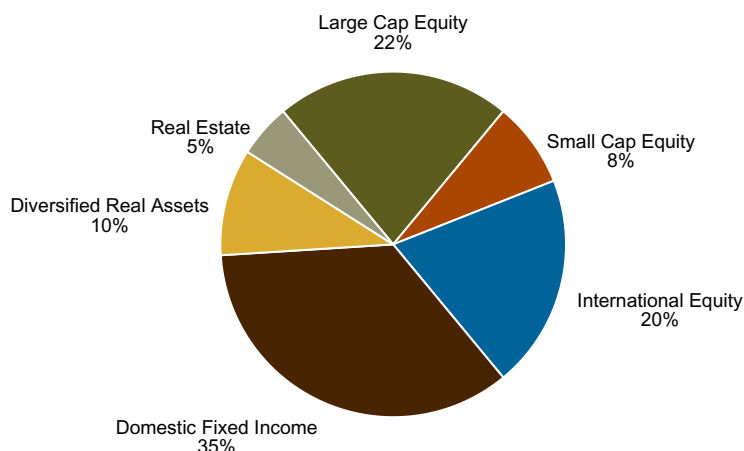
## Actual vs Target Asset Allocation As of September 30, 2015

The first chart below shows the Fund's asset allocation as of September 30, 2015. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

**Actual Asset Allocation**



**Target Asset Allocation**



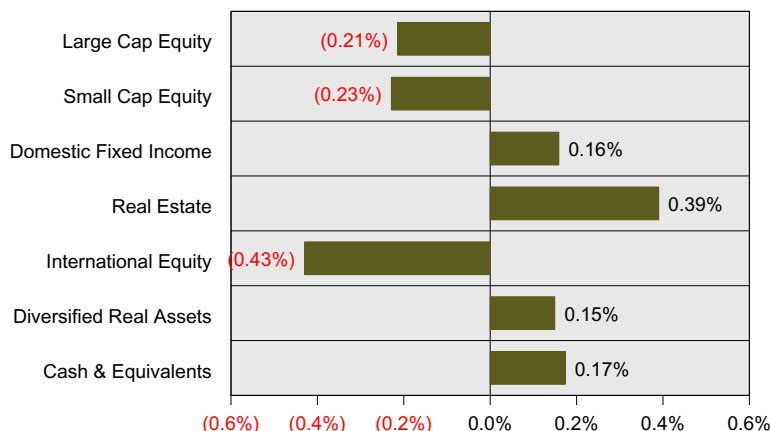
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	704,403	21.2%	22.0%	(0.8%)	(27,880)
Small Cap Equity	240,136	7.2%	8.0%	(0.8%)	(26,148)
International Equity	630,047	18.9%	20.0%	(1.1%)	(35,664)
Domestic Fixed Income	1,210,022	36.4%	35.0%	1.4%	45,027
Diversified Real Assets	343,803	10.3%	10.0%	0.3%	10,947
Cash & Equivalents	15,278	0.5%	0.0%	0.5%	15,278
Real Estate	184,868	5.6%	5.0%	0.6%	18,440
Total	3,328,557	100.0%	100.0%		

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

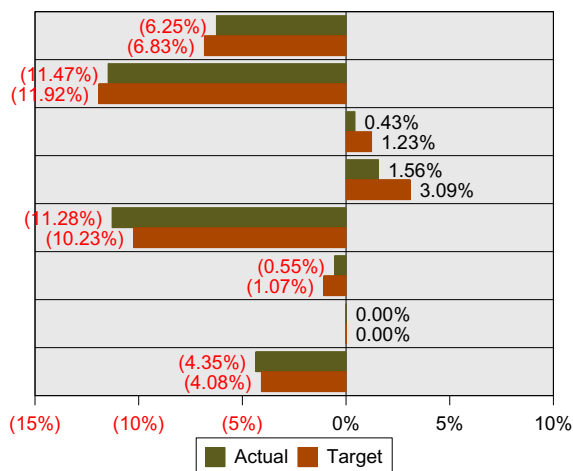
## Quarterly Total Fund Relative Attribution - September 30, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

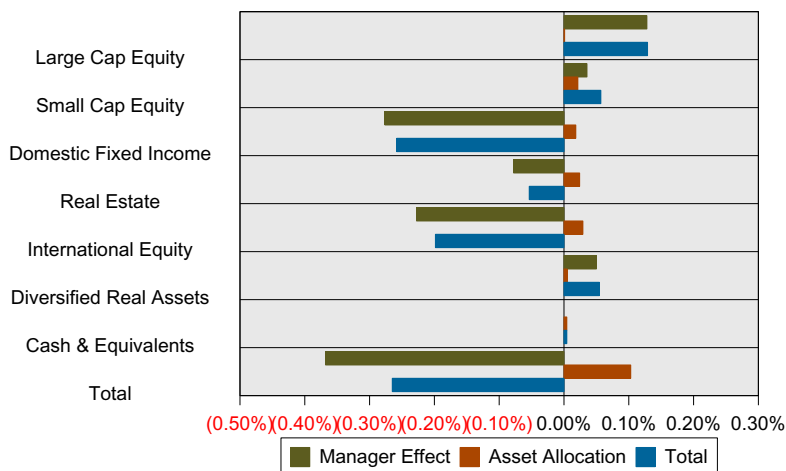
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended September 30, 2015

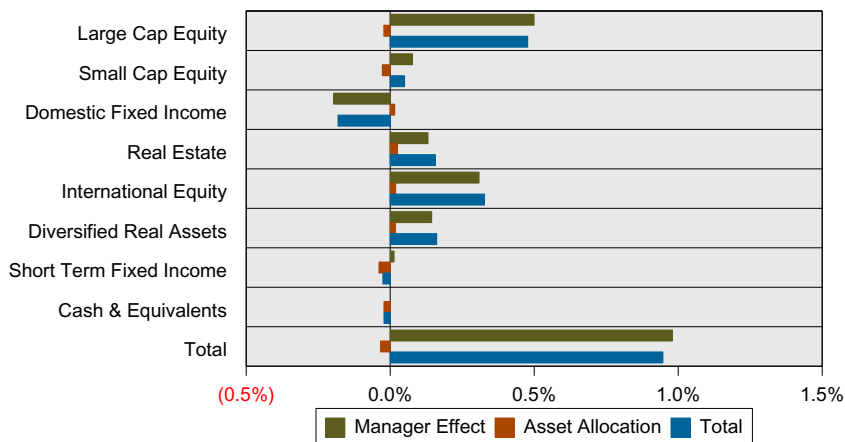
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	(6.25%)	(6.83%)	0.13%	0.00%	0.13%
Small Cap Equity	8%	8%	(11.47%)	(11.92%)	0.04%	0.02%	0.06%
Domestic Fixed Income	35%	35%	0.43%	1.23%	(0.28%)	0.02%	(0.26%)
Real Estate	5%	5%	1.56%	3.09%	(0.08%)	0.02%	(0.05%)
International Equity	20%	20%	(11.28%)	(10.23%)	(0.23%)	0.03%	(0.20%)
Diversified Real Assets	10%	10%	(0.55%)	(1.07%)	0.05%	0.00%	0.05%
Cash & Equivalents	0%	0%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Total</b>			<b>(4.35%)</b>	<b>(4.08%)</b>	<b>(0.37%)</b>	<b>0.10%</b>	<b>(0.26%)</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

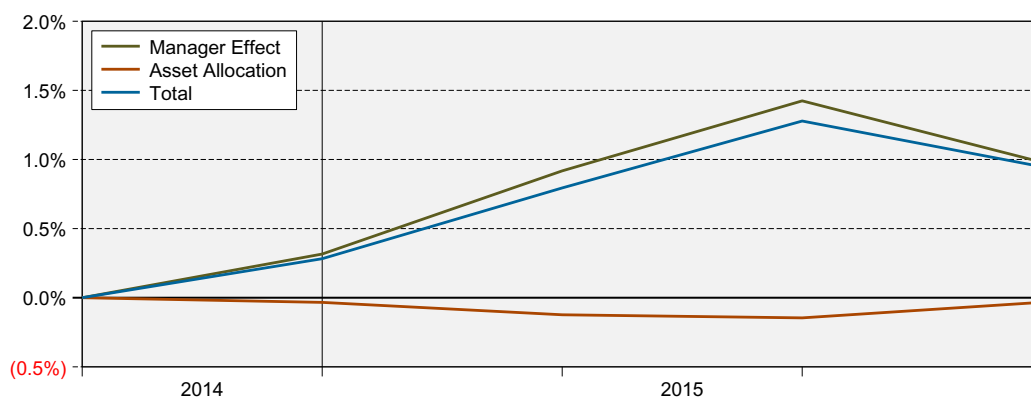
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

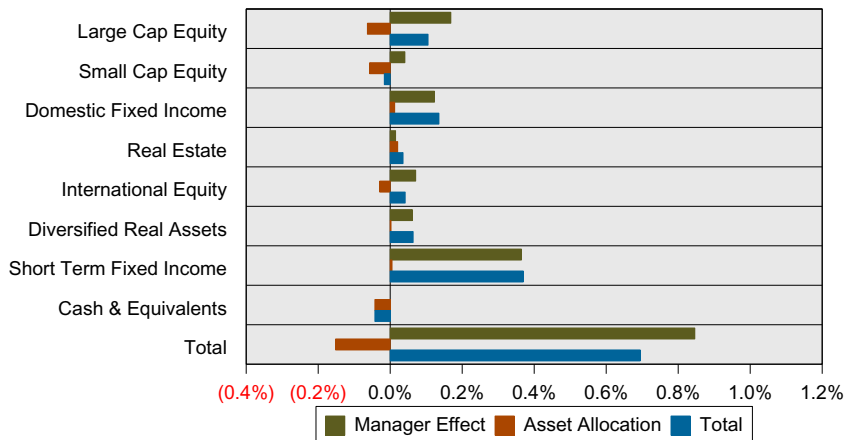
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	1.68%	(0.61%)	0.50%	(0.02%)	0.48%
Small Cap Equity	8%	8%	2.27%	1.25%	0.08%	(0.03%)	0.05%
Domestic Fixed Income	34%	35%	2.37%	2.94%	(0.20%)	0.02%	(0.18%)
Real Estate	5%	5%	16.48%	13.48%	0.13%	0.03%	0.16%
International Equity	20%	20%	(7.27%)	(8.66%)	0.31%	0.02%	0.33%
Diversified Real Assets	9%	9%	(0.43%)	(1.89%)	0.14%	0.02%	0.16%
Short Term Fixed Income	2%	2%	-	-	0.01%	(0.04%)	(0.03%)
Cash & Equivalents	0%	0%	0.00%	0.00%	0.00%	(0.02%)	(0.02%)
<b>Total</b>			<b>0.76%</b>	<b>(0.19%)</b>	<b>0.98%</b>	<b>(0.03%)</b>	<b>0.95%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

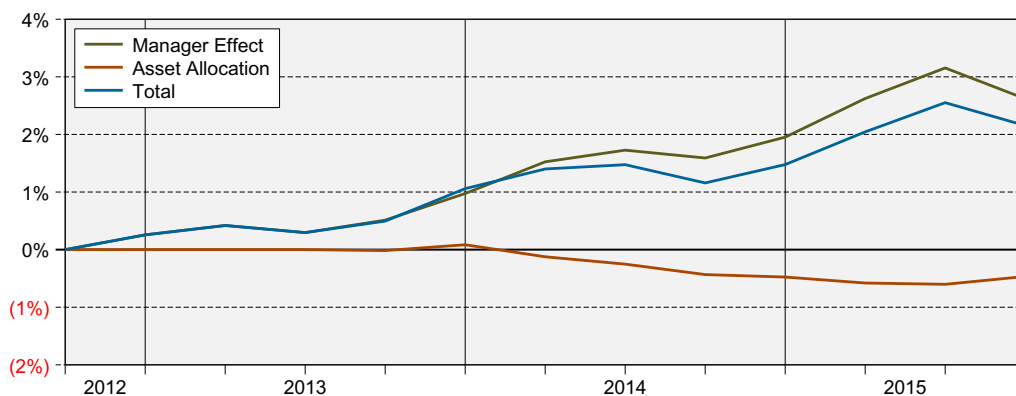
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

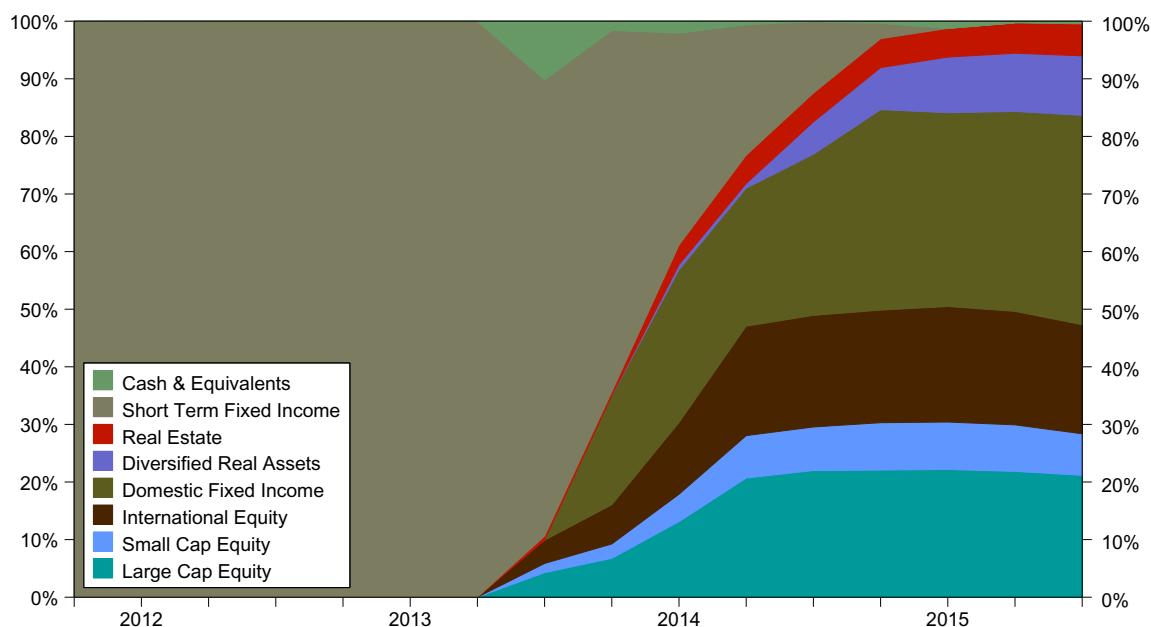
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	12%	12%	-	-	0.17%	(0.06%)	0.11%
Small Cap Equity	4%	4%	-	-	0.04%	(0.06%)	(0.02%)
Domestic Fixed Income	18%	18%	-	-	0.12%	0.01%	0.14%
Real Estate	3%	3%	-	-	0.01%	0.02%	0.04%
International Equity	11%	11%	-	-	0.07%	(0.03%)	0.04%
Diversified Real Assets	3%	3%	-	-	0.06%	0.00%	0.06%
Short Term Fixed Income	47%	48%	-	-	0.36%	0.01%	0.37%
Cash & Equivalents	1%	0%	0.05%	0.05%	0.00%	(0.04%)	(0.04%)
<b>Total</b>			<b>2.02%</b>	<b>1.33%</b>	<b>0.85%</b>	<b>(0.15%)</b>	<b>0.69%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

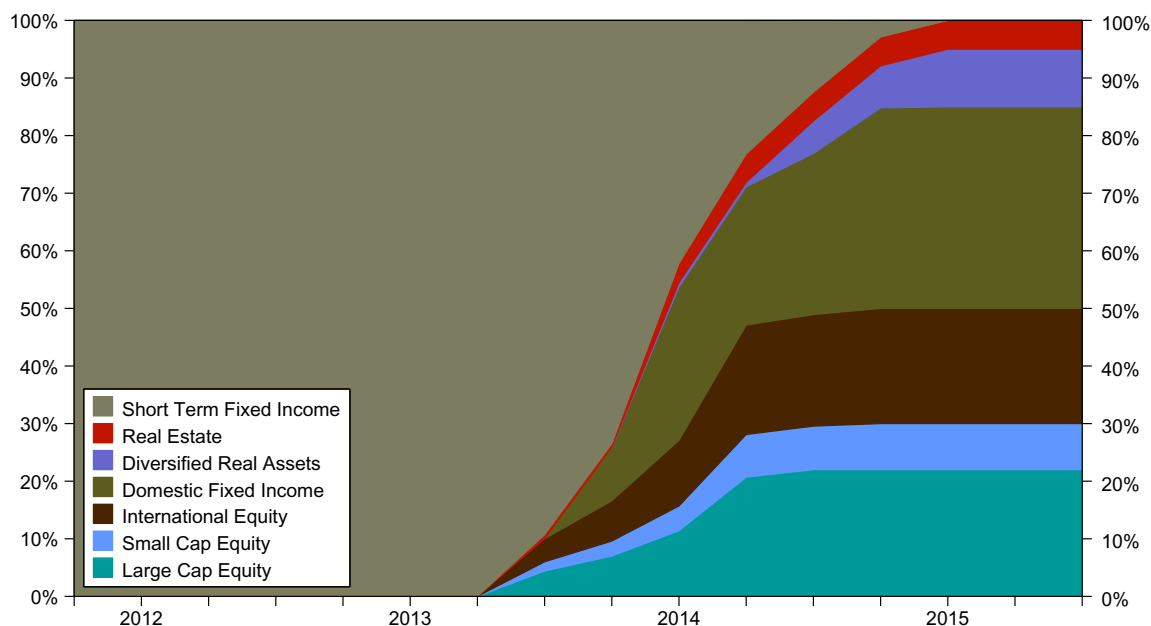
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

### Actual Historical Asset Allocation



### Target Historical Asset Allocation



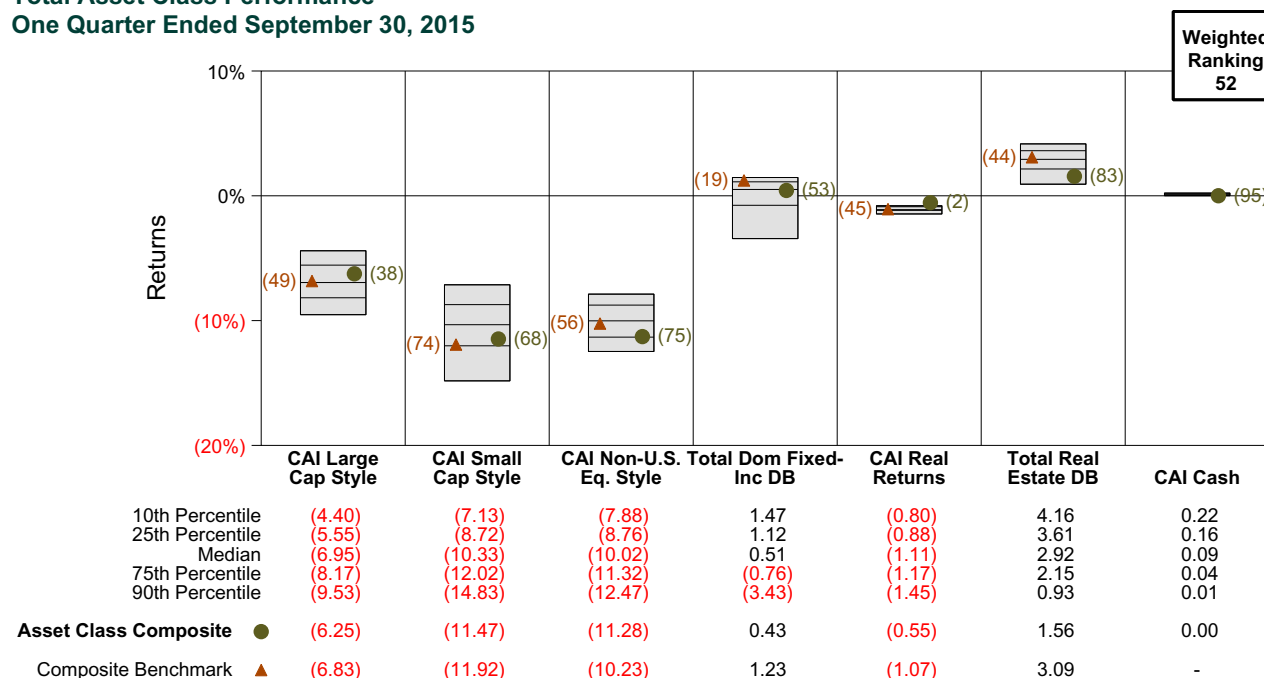
\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.



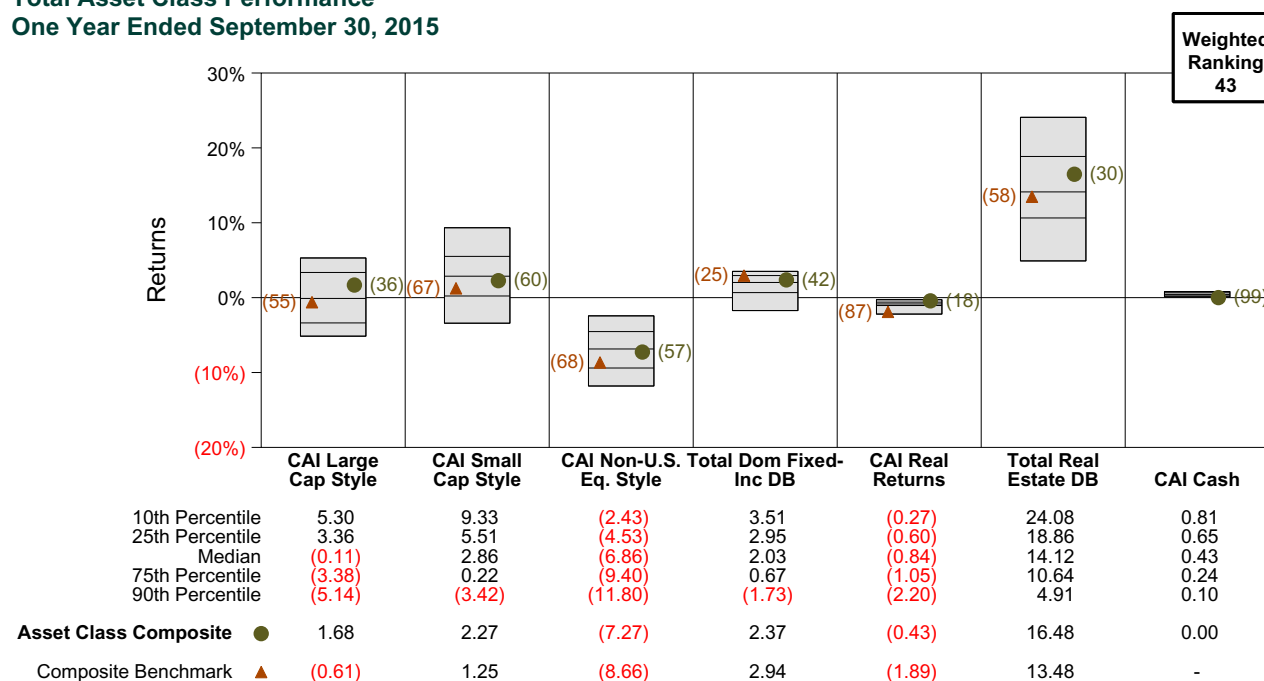
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Quarter Ended September 30, 2015



### Total Asset Class Performance One Year Ended September 30, 2015



\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

## Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of June 30, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Class Allocation

	September 30, 2015				June 30, 2015	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>Domestic Equity</b>	<b>\$944,539,360</b>	<b>28.38%</b>	<b>\$26,653,150</b>	<b>\$(78,027,684)</b>	<b>\$995,913,894</b>	<b>29.92%</b>
<b>Large Cap Equity</b>	<b>\$704,402,930</b>	<b>21.16%</b>	<b>\$24,543,216</b>	<b>\$(47,103,597)</b>	<b>\$726,963,311</b>	<b>21.84%</b>
L.A. Capital Enhanced	141,983,108	4.27%	3,938,177	(7,961,541)	146,006,471	4.39%
L.A. Capital Large Cap Growth	213,537,656	6.42%	3,861,541	(10,932,049)	220,608,163	6.63%
Parametric Clifton Large Cap	141,156,112	4.24%	9,905,118	(9,374,342)	140,625,336	4.22%
LSV Large Cap Value	207,726,054	6.24%	6,838,380	(18,835,666)	219,723,340	6.60%
<b>Small Cap Equity</b>	<b>\$240,136,431</b>	<b>7.21%</b>	<b>\$2,109,934</b>	<b>\$(30,924,086)</b>	<b>\$268,950,583</b>	<b>8.08%</b>
Parametric Clifton SmallCap	156,362,290	4.70%	(823,405)	(20,518,973)	177,704,668	5.34%
Research Affiliates	83,774,141	2.52%	2,933,339	(10,405,114)	91,245,915	2.74%
<b>International Equity</b>	<b>\$630,047,337</b>	<b>18.93%</b>	<b>\$51,489,493</b>	<b>\$(77,349,324)</b>	<b>\$655,907,169</b>	<b>19.71%</b>
Capital Group	252,254,862	7.58%	30,746,126	(37,722,277)	259,231,013	7.79%
DFA Intl SmallCap Value	61,394,164	1.84%	0	(6,233,720)	67,627,884	2.03%
LSV Intl Value	253,229,819	7.61%	20,743,367	(28,743,114)	261,229,566	7.85%
Vanguard Intl Explorer Fund	63,168,493	1.90%	0	(4,650,213)	67,818,706	2.04%
<b>Domestic Fixed Income</b>	<b>\$1,210,021,979</b>	<b>36.35%</b>	<b>\$49,983,201</b>	<b>\$4,949,125</b>	<b>\$1,155,089,653</b>	<b>34.70%</b>
Declaration Total Return	101,515,417	3.05%	8,168,863	868,759	92,477,795	2.78%
PIMCO DiSCO II	41,706,299	1.25%	0	162,100	41,544,199	1.25%
PIMCO Bravo II	18,611,691	0.56%	0	0	18,611,691	0.56%
Prudential	130,014,334	3.91%	1,912,350	828,359	127,273,624	3.82%
SSgA US Govt Credit Bd Idx	170,767,219	5.13%	7,086,539	1,953,681	161,726,998	4.86%
Wells Capital	370,871,861	11.14%	17,238,465	(1,705,603)	355,338,999	10.68%
Western Asset Management	376,535,158	11.31%	15,576,984	2,841,828	358,116,346	10.76%
<b>Diversified Real Assets</b>	<b>\$343,802,757</b>	<b>10.33%</b>	<b>\$9,016,573</b>	<b>\$(2,007,342)</b>	<b>\$336,793,527</b>	<b>10.12%</b>
Western TIPS	253,966,654	7.63%	1,915,133	(3,571,926)	255,623,447	7.68%
JP Morgan Infrastructure	78,938,124	2.37%	(206,832)	1,800,092	77,344,865	2.32%
Grosvenor Cust. Infrastructure	10,897,979	0.33%	7,308,272	(235,508)	3,825,215	0.11%
<b>Real Estate</b>	<b>\$184,867,720</b>	<b>5.55%</b>	<b>\$6,885,045</b>	<b>\$2,846,499</b>	<b>\$175,136,176</b>	<b>5.26%</b>
Invesco Core Real Estate	95,439,529	2.87%	6,925,321	2,747,939	85,766,269	2.58%
JP Morgan RE Inc & Growth	89,428,192	2.69%	(40,275)	98,560	89,369,907	2.68%
<b>Cash &amp; Equivalents</b>	<b>\$15,278,061</b>	<b>0.46%</b>	<b>\$5,518,230</b>	<b>\$98</b>	<b>\$9,759,734</b>	<b>0.29%</b>
<b>Securities Lending Income</b>	<b>\$0</b>	<b>0.00%</b>	<b>\$(19,220)</b>	<b>\$19,220</b>	<b>-</b>	<b>-</b>
<b>Total Fund</b>	<b>\$3,328,557,215</b>	<b>100.0%</b>	<b>\$149,526,472</b>	<b>\$(149,569,409)</b>	<b>\$3,328,600,152</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended September 30, 2015

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
<b>Domestic Equity</b>				
Gross	(7.66%)	1.82%	-	-
Net	(7.78%)	1.57%	-	-
<b>Large Cap Equity</b>				
Gross	(6.25%)	1.68%	-	-
Net	(6.31%)	1.49%	-	-
Russell 1000 Index	(6.83%)	(0.61%)	12.66%	16.78%
L.A. Capital Enhanced - Gross	(5.27%)	1.80%	-	-
L.A. Capital Enhanced - Net	(5.30%)	1.66%	-	-
Russell 1000 Index	(6.83%)	(0.61%)	12.66%	16.78%
L.A. Capital LargeCap Growth - Gross	(4.82%)	5.52%	-	-
L.A. Capital LargeCap Growth - Net	(4.88%)	5.30%	-	-
Russell 1000 Growth Index	(5.29%)	3.17%	13.61%	17.32%
Parametric Clifton Large Cap - Gross	(6.23%)	0.09%	-	-
Parametric Clifton Large Cap - Net	(6.29%)	0.02%	-	-
S&P 500 Index	(6.44%)	(0.61%)	12.40%	16.61%
LSV Large Cap Value - Gross	(8.32%)	(1.25%)	-	-
LSV Large Cap Value - Net	(8.39%)	(1.54%)	-	-
Russell 1000 Value Index	(8.39%)	(4.42%)	11.59%	16.14%
<b>Small Cap Equity</b>				
Gross	(11.47%)	2.27%	-	-
Net	(11.78%)	1.84%	-	-
Russell 2000 Index	(11.92%)	1.25%	11.02%	15.91%
Parametric Clifton Small Cap - Gross	(11.58%)	3.12%	-	-
Parametric Clifton Small Cap - Net	(12.01%)	2.62%	-	-
Russell 2000 Index	(11.92%)	1.25%	11.02%	15.91%
Research Affiliates - Gross	(11.38%)	0.27%	-	-
Research Affiliates - Net	(11.45%)	(0.03%)	-	-
Russell 2000 Index	(11.92%)	1.25%	11.02%	15.91%
<b>International Equity</b>				
Gross	(11.28%)	(7.27%)	-	-
Net	(11.35%)	(7.56%)	-	-
MSCI EAFE Index	(10.23%)	(8.66%)	5.63%	7.61%
Capital Group - Gross	(13.76%)	(9.74%)	-	-
Capital Group - Net	(13.85%)	(10.08%)	-	-
MSCI EAFE Index	(10.23%)	(8.66%)	5.63%	7.61%
DFA Intl Small Cap Value	(9.22%)	(4.00%)	-	-
World ex US SC Va	(8.82%)	(6.60%)	7.87%	8.84%
LSV Intl Value - Gross	(10.40%)	(7.34%)	-	-
LSV Intl Value - Net	(10.48%)	(7.72%)	-	-
MSCI EAFE Index	(10.23%)	(8.66%)	5.63%	7.61%
Vanguard Intl Explorer Fund	(6.86%)	(0.52%)	-	-
BMI, EPAC, <\$2 B	(8.35%)	(1.45%)	8.94%	9.31%

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended September 30, 2015

	Last Quarter	Last Year	Last 3 Years	Last 4 Years
<b>Domestic Fixed Income</b>				
Gross	0.43%	2.37%	-	-
Net	0.40%	2.24%	-	-
Barclays Aggregate Index	1.23%	2.94%	1.71%	2.56%
Declaration Total Return - Net	0.89%	3.79%	-	-
Libor-3 Month	0.08%	0.27%	0.27%	0.32%
PIMCO DiSCO II - Net	0.39%	3.25%	-	-
PIMCO Bravo II Fund - Net	0.00%	10.36%	-	-
Barclays Aggregate Index	1.23%	2.94%	1.71%	2.56%
Prudential - Gross	0.65%	3.14%	-	-
Prudential - Net	0.58%	2.87%	-	-
Barclays Aggregate Index	1.23%	2.94%	1.71%	2.56%
Wells Capital - Gross	(0.46%)	0.68%	-	-
Wells Capital - Net	(0.50%)	0.51%	-	-
Barclays Baa Credit 3% In	(0.76%)	(0.49%)	1.94%	4.48%
Western Asset - Gross	0.79%	2.93%	-	-
Western Asset - Net	0.76%	2.79%	-	-
Barclays Aggregate Index	1.23%	2.94%	1.71%	2.56%
SSgA US Govt Credit Bd Idx - Gross	1.20%	2.76%	-	-
SSgA US Govt Credit Bd Idx - Net	1.19%	2.73%	-	-
Barclays Govt/Credit Bd	1.20%	2.73%	1.59%	2.59%
<b>Diversified Real Assets</b>				
Gross	(0.55%)	(0.43%)	-	-
Net	(0.63%)	(0.58%)	-	-
Weighted Benchmark	(1.07%)	(1.89%)	-	-
Western Asset TIPS - Gross	(1.38%)	(2.14%)	-	-
Western Asset TIPS - Net	(1.41%)	(2.26%)	-	-
Barclays Gbl Inftn-Lnked	(1.27%)	(2.76%)	0.04%	1.91%
JP Morgan Infrastructure - Gross	2.33%	-	-	-
JP Morgan Infrastructure - Net	2.10%	-	-	-
CPI-W	(0.49%)	(0.64%)	0.65%	0.99%
Grosvenor Cust. Infrastructure - Net	(2.94%)	-	-	-
CPI-W	(0.49%)	(0.64%)	0.65%	0.99%
<b>Real Estate</b>				
Gross	1.56%	16.48%	-	-
Net	1.55%	15.67%	-	-
NCREIF Total Index	3.09%	13.48%	11.90%	11.68%
Invesco Core Real Estate - Gross	2.96%	15.84%	-	-
Invesco Core Real Estate - Net	2.88%	15.44%	-	-
NCREIF Total Index	3.09%	13.48%	11.90%	11.68%
JP Morgan RE Inc & Growth - Gross	0.11%	16.81%	-	-
JP Morgan RE Inc & Growth - Net	0.16%	15.64%	-	-
NCREIF Total Index	3.09%	13.48%	11.90%	11.68%
<b>Cash &amp; Equivalents - Net</b>	<b>0.00%</b>	<b>0.00%</b>	<b>0.05%</b>	<b>0.10%</b>
90 Day Treasury Bills	0.01%	0.02%	0.06%	0.06%
<b>Total Fund</b>				
Gross	(4.35%)	0.76%	2.02%	2.02%
Net	(4.42%)	0.52%	1.85%	1.88%
Target*	(4.08%)	(0.19%)	1.33%	1.12%

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE Index, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.



## Parametric Clifton Large Cap Period Ended September 30, 2015

### Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

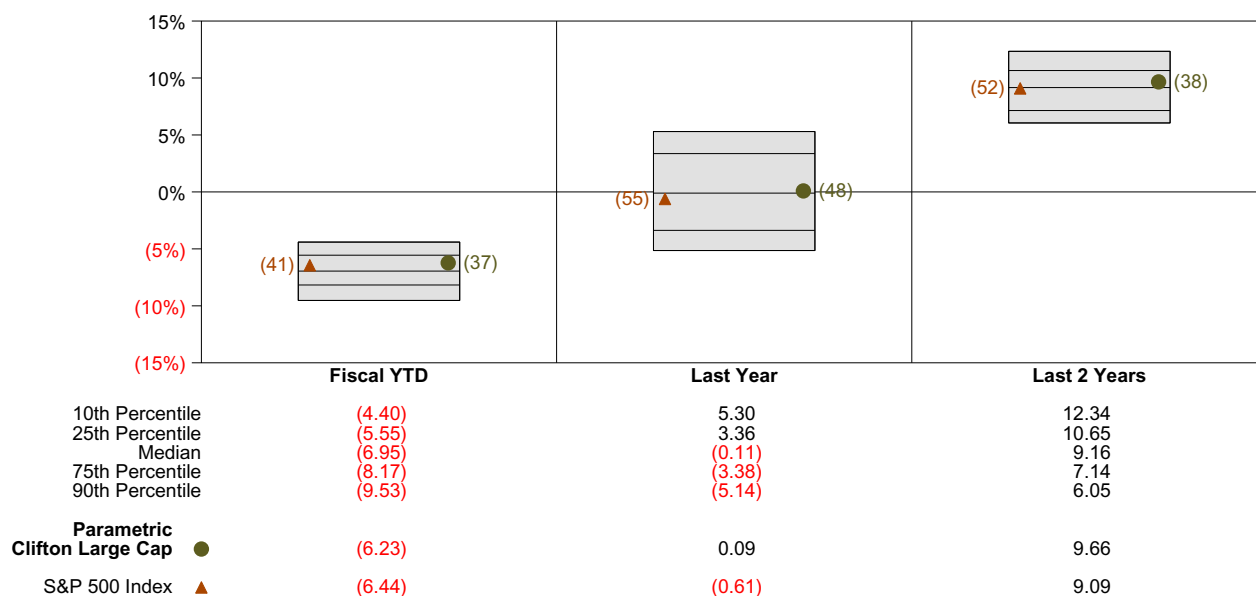
### Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a (6.23)% return for the quarter placing it in the 37 percentile of the CAI Large Capitalization Style group for the quarter and in the 48 percentile for the last year.
- Parametric Clifton Large Cap's portfolio outperformed the S&P 500 Index by 0.21% for the quarter and outperformed the S&P 500 Index for the year by 0.70%.

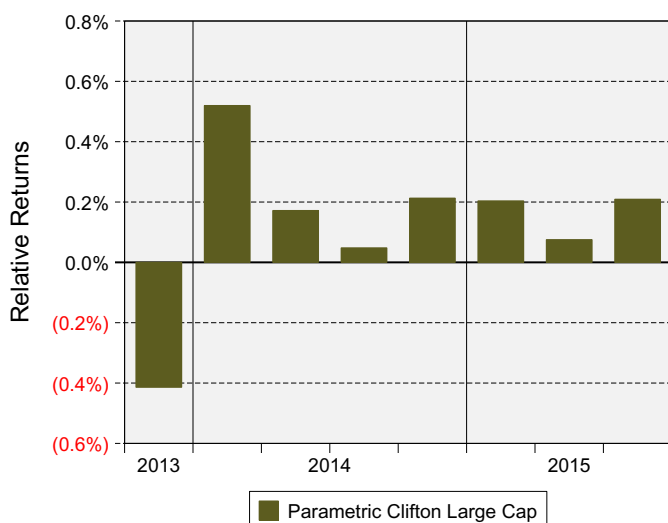
### Quarterly Asset Growth

Beginning Market Value	\$140,625,336
Net New Investment	\$9,905,118
Investment Gains/(Losses)	\$-9,374,342
Ending Market Value	\$141,156,112

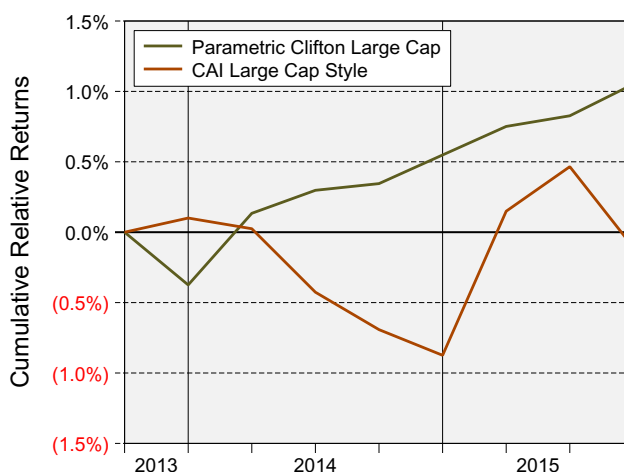
### Performance vs CAI Large Capitalization Style (Gross)



### Relative Return vs S&P 500 Index



### Cumulative Returns vs S&P 500 Index



## L.A. Capital Period Ended September 30, 2015

### Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

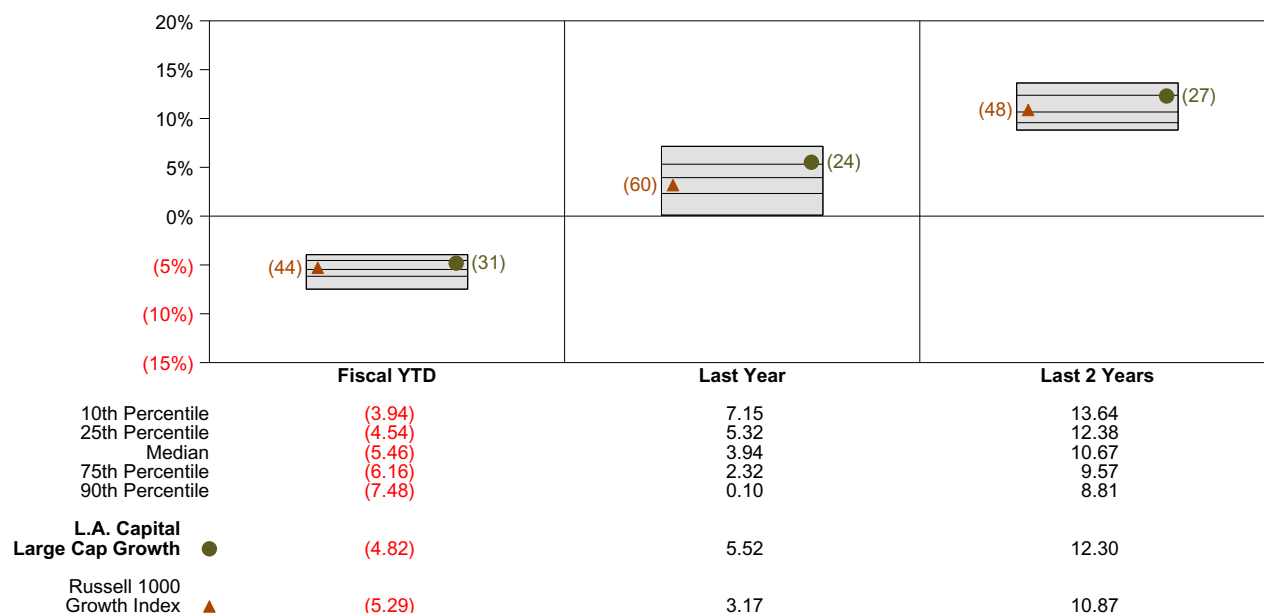
### Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a (4.82)% return for the quarter placing it in the 31 percentile of the CAI Large Cap Growth Style group for the quarter and in the 24 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 0.47% for the quarter and outperformed the Russell 1000 Growth Index for the year by 2.34%.

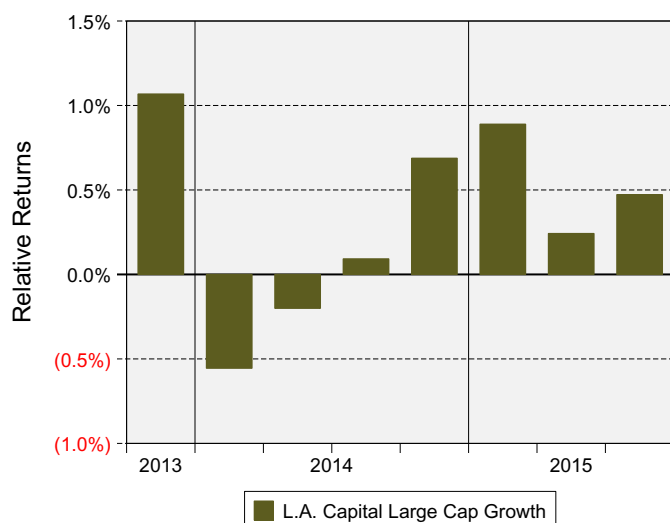
### Quarterly Asset Growth

Beginning Market Value	\$220,608,163
Net New Investment	\$3,861,541
Investment Gains/(Losses)	\$-10,932,049
Ending Market Value	\$213,537,656

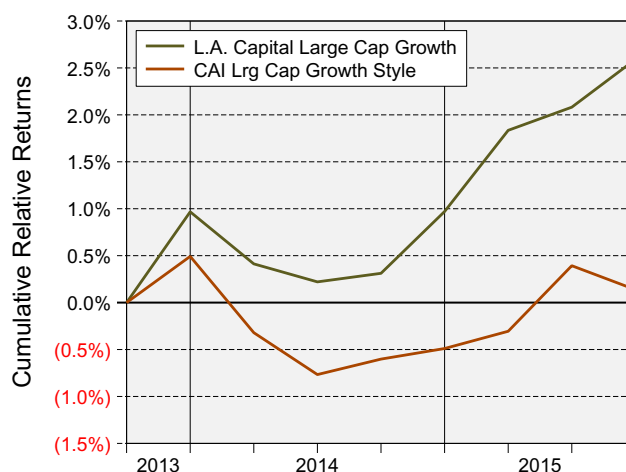
### Performance vs CAI Large Cap Growth Style (Gross)



### Relative Return vs Russell 1000 Growth Index



### Cumulative Returns vs Russell 1000 Growth Index



## L.A. Capital Enhanced Period Ended September 30, 2015

### Investment Philosophy

The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

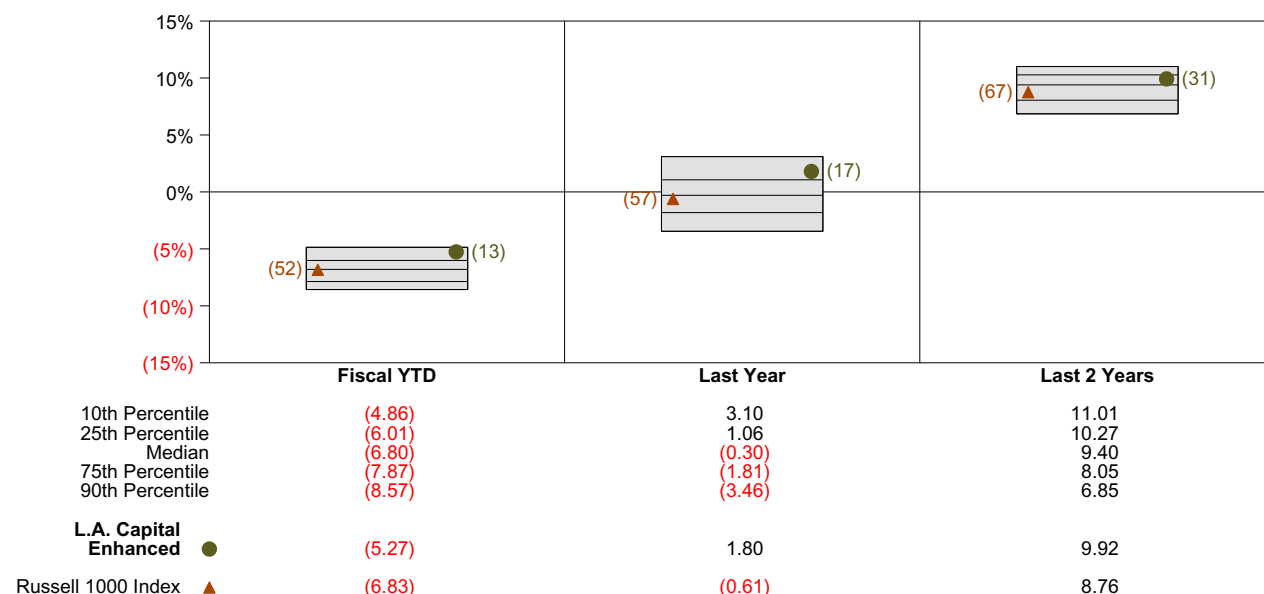
### Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a (5.27)% return for the quarter placing it in the 13 percentile of the CAI Large Cap Core Style group for the quarter and in the 17 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 1.56% for the quarter and outperformed the Russell 1000 Index for the year by 2.41%.

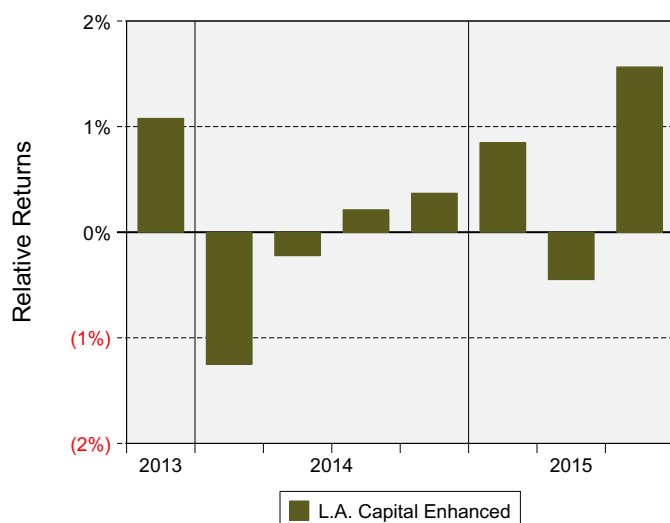
### Quarterly Asset Growth

Beginning Market Value	\$146,006,471
Net New Investment	\$3,938,177
Investment Gains/(Losses)	\$-7,961,541
Ending Market Value	\$141,983,108

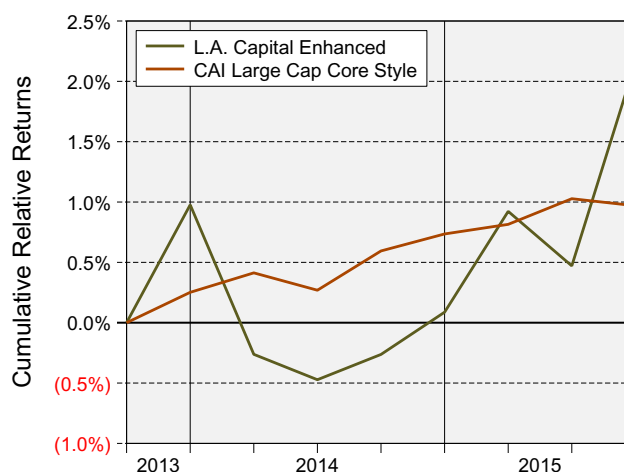
### Performance vs CAI Large Cap Core Style (Gross)



### Relative Return vs Russell 1000 Index



### Cumulative Returns vs Russell 1000 Index





# LSV Asset Management

## Period Ended September 30, 2015

### Investment Philosophy

The objective of LSV Asset Management's Large Cap Value Equity (U.S.) strategy is to outperform the Russell 1000 Value by at least 200 basis points (gross of fees) per annum over a 3-5 year period with a tracking error of approximately 4%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 100 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested.

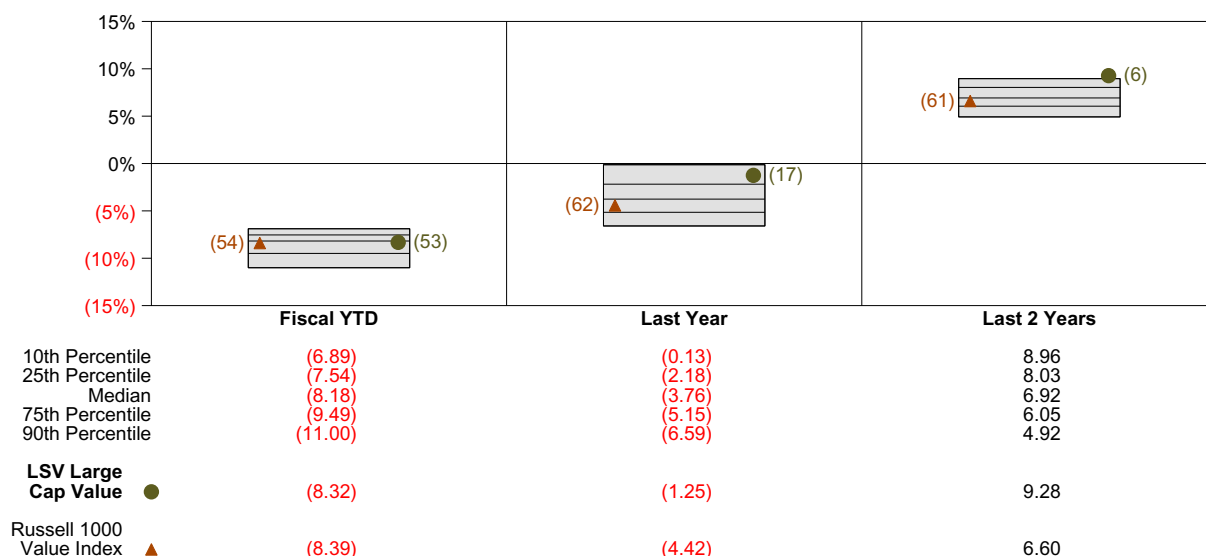
### Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a (8.32)% return for the quarter placing it in the 53 percentile of the CAI Large Cap Value Style group for the quarter and in the 17 percentile for the last year.
- LSV Large Cap Value's portfolio outperformed the Russell 1000 Value Index by 0.07% for the quarter and outperformed the Russell 1000 Value Index for the year by 3.17%.

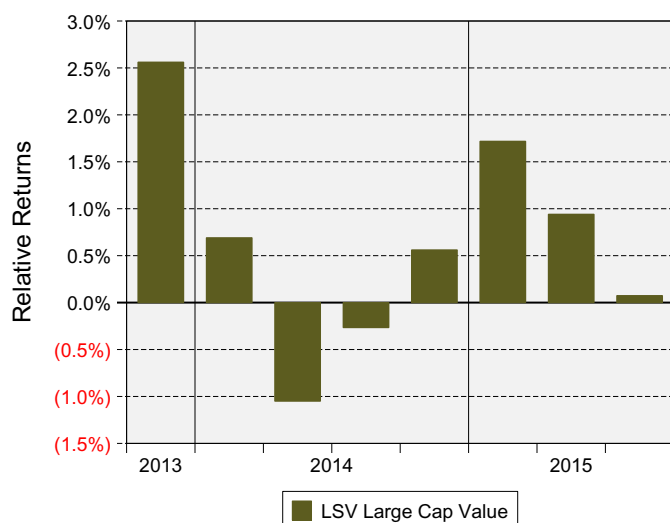
### Quarterly Asset Growth

Beginning Market Value	\$219,723,340
Net New Investment	\$6,838,380
Investment Gains/(Losses)	\$-18,835,666
Ending Market Value	\$207,726,054

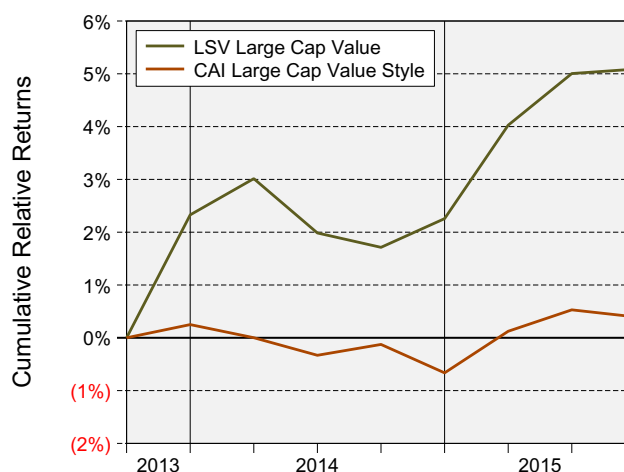
### Performance vs CAI Large Cap Value Style (Gross)



### Relative Return vs Russell 1000 Value Index



### Cumulative Returns vs Russell 1000 Value Index



## Parametric Clifton Small Cap Period Ended September 30, 2015

### Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

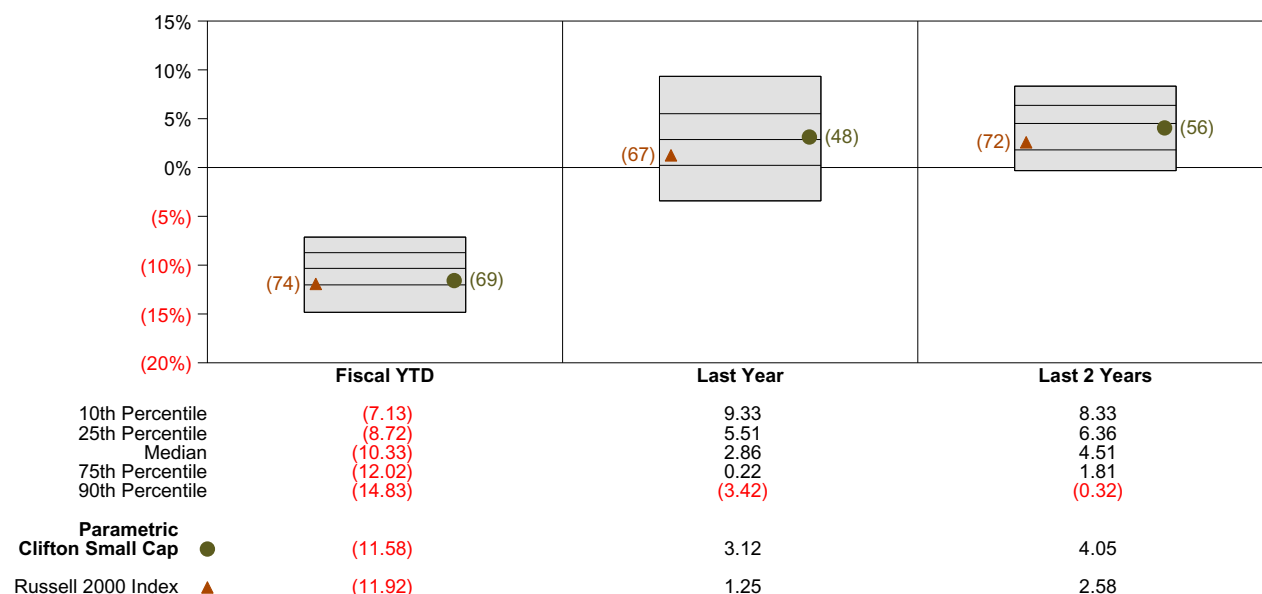
### Quarterly Summary and Highlights

- Parametric Clifton Small Cap's portfolio posted a (11.58)% return for the quarter placing it in the 69 percentile of the CAI Small Capitalization Style group for the quarter and in the 48 percentile for the last year.
- Parametric Clifton Small Cap's portfolio outperformed the Russell 2000 Index by 0.34% for the quarter and outperformed the Russell 2000 Index for the year by 1.88%.

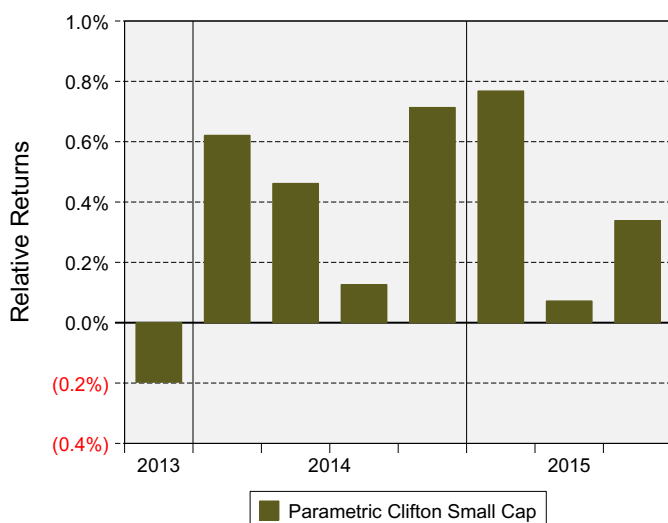
### Quarterly Asset Growth

Beginning Market Value	\$177,704,668
Net New Investment	\$-823,405
Investment Gains/(Losses)	\$-20,518,973
Ending Market Value	\$156,362,290

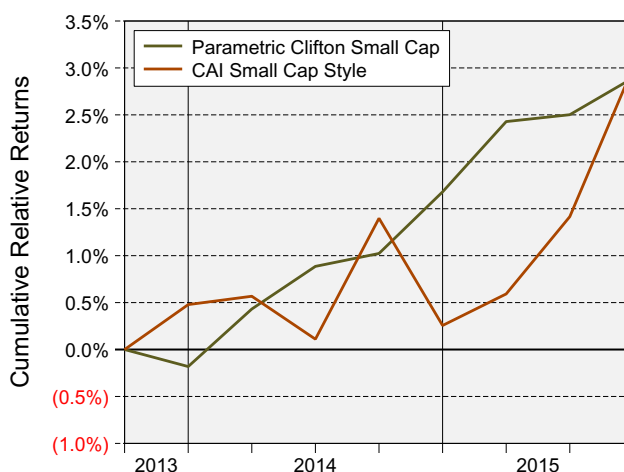
### Performance vs CAI Small Capitalization Style (Gross)



### Relative Return vs Russell 2000 Index



### Cumulative Returns vs Russell 2000 Index



## Research Affiliates Period Ended September 30, 2015

### Investment Philosophy

Small company value equity portfolio utilizing the index strategy and philosophy described as the Enhanced RAFI US Small strategy which relies on portfolio weights derived from firm fundamentals (free cash flow, book equity value, total sales and gross dividend), instead of market capitalization. Additionally, the enhanced portfolio strategy uses a quality of earnings screening and a financial distress screening to augment portfolio returns and reduce portfolio volatility.

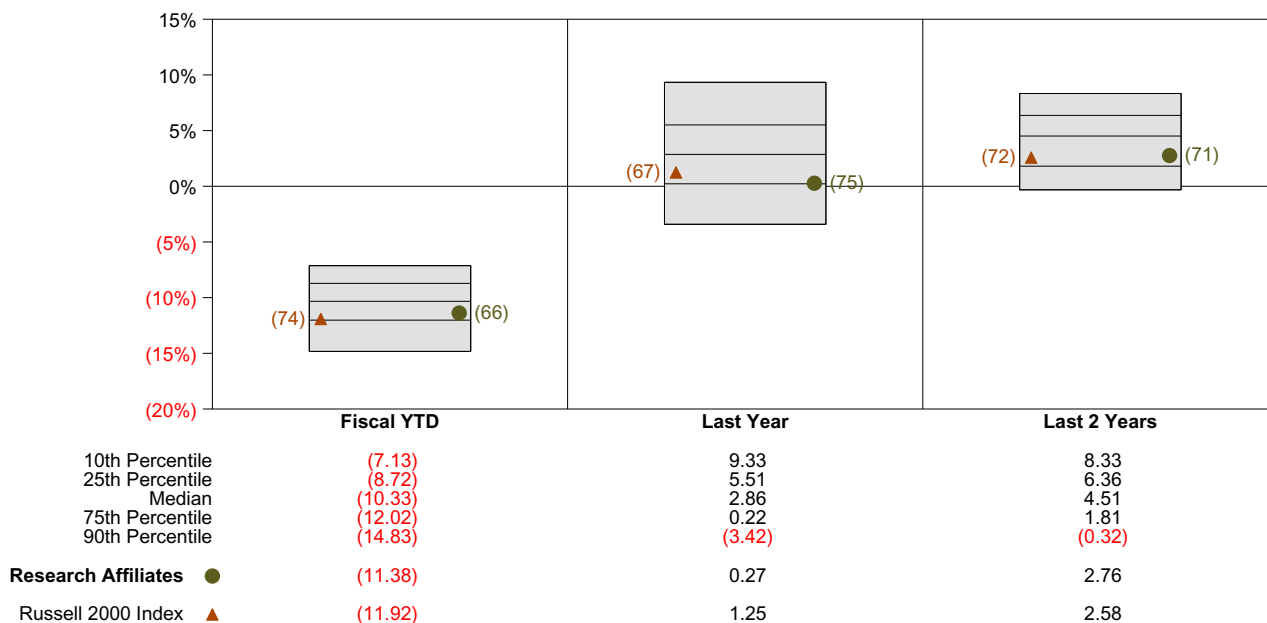
### Quarterly Summary and Highlights

- Research Affiliates's portfolio posted a (11.38)% return for the quarter placing it in the 66 percentile of the CAI Small Capitalization Style group for the quarter and in the 75 percentile for the last year.
- Research Affiliates's portfolio outperformed the Russell 2000 Index by 0.54% for the quarter and underperformed the Russell 2000 Index for the year by 0.97%.

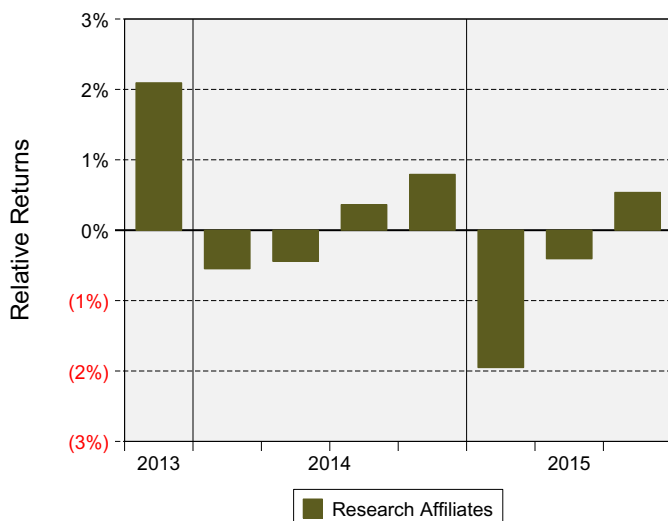
### Quarterly Asset Growth

Beginning Market Value	\$91,245,915
Net New Investment	\$2,933,339
Investment Gains/(Losses)	\$-10,405,114
Ending Market Value	\$83,774,141

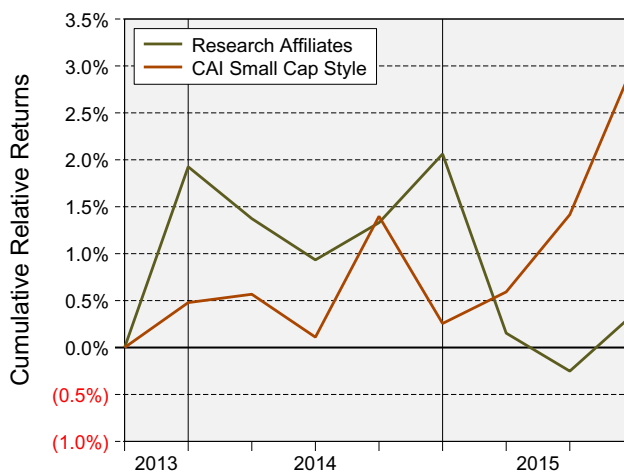
### Performance vs CAI Small Capitalization Style (Gross)



### Relative Return vs Russell 2000 Index



### Cumulative Returns vs Russell 2000 Index





## Capital Group Period Ended September 30, 2015

### Investment Philosophy

The Portfolio will invest primarily in equity or equity type securities of companies in developed countries excluding the U.S. These equity securities will be listed on a stock exchange or traded in another recognized market and include, but are not limited to, common and preferred stocks, securities convertible or exchangeable into common or preferred stock, warrants, rights and depository arrangements.

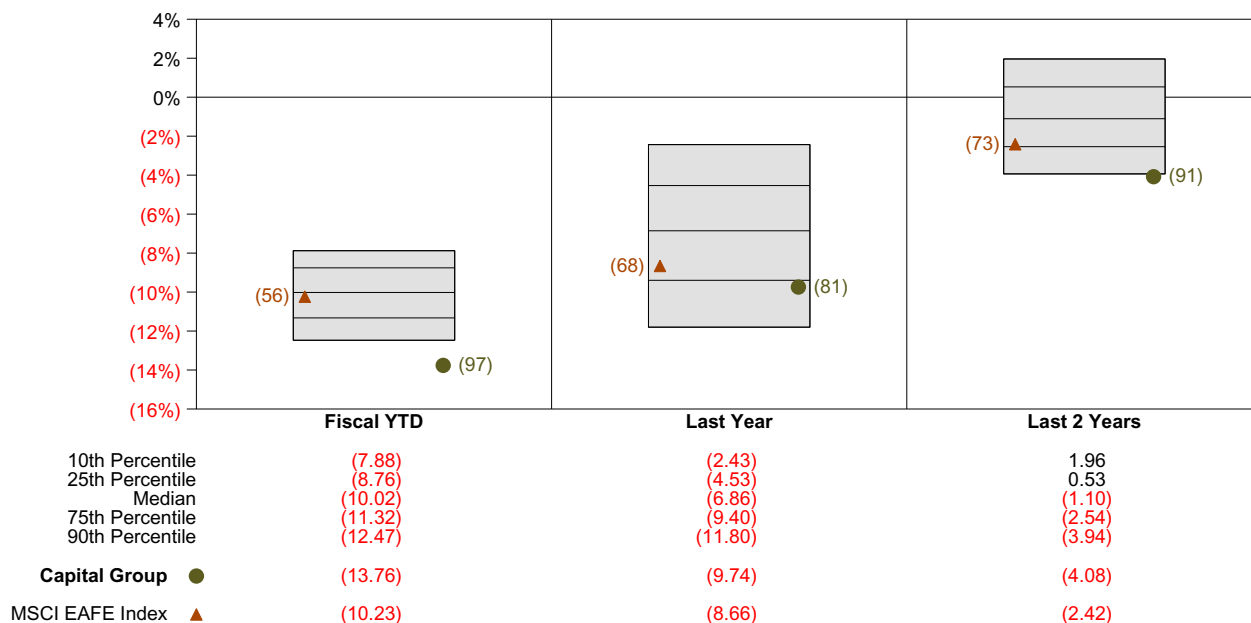
### Quarterly Summary and Highlights

- Capital Group's portfolio posted a (13.76)% return for the quarter placing it in the 97 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 81 percentile for the last year.
- Capital Group's portfolio underperformed the MSCI EAFE Index by 3.53% for the quarter and underperformed the MSCI EAFE Index for the year by 1.08%.

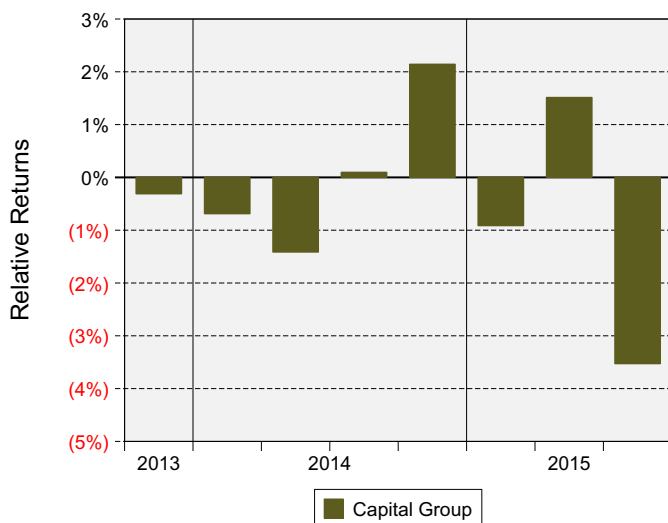
### Quarterly Asset Growth

Beginning Market Value	\$259,231,013
Net New Investment	\$30,746,126
Investment Gains/(Losses)	\$-37,722,277
Ending Market Value	\$252,254,862

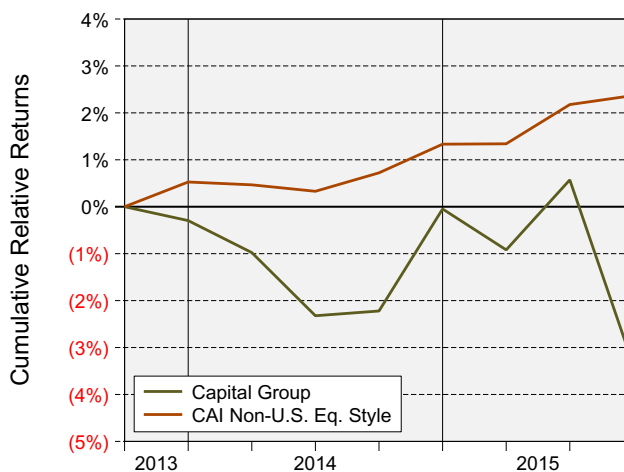
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI EAFE Index



### Cumulative Returns vs MSCI EAFE Index



## DFA Intl Small Cap Value Period Ended September 30, 2015

### Investment Philosophy

The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

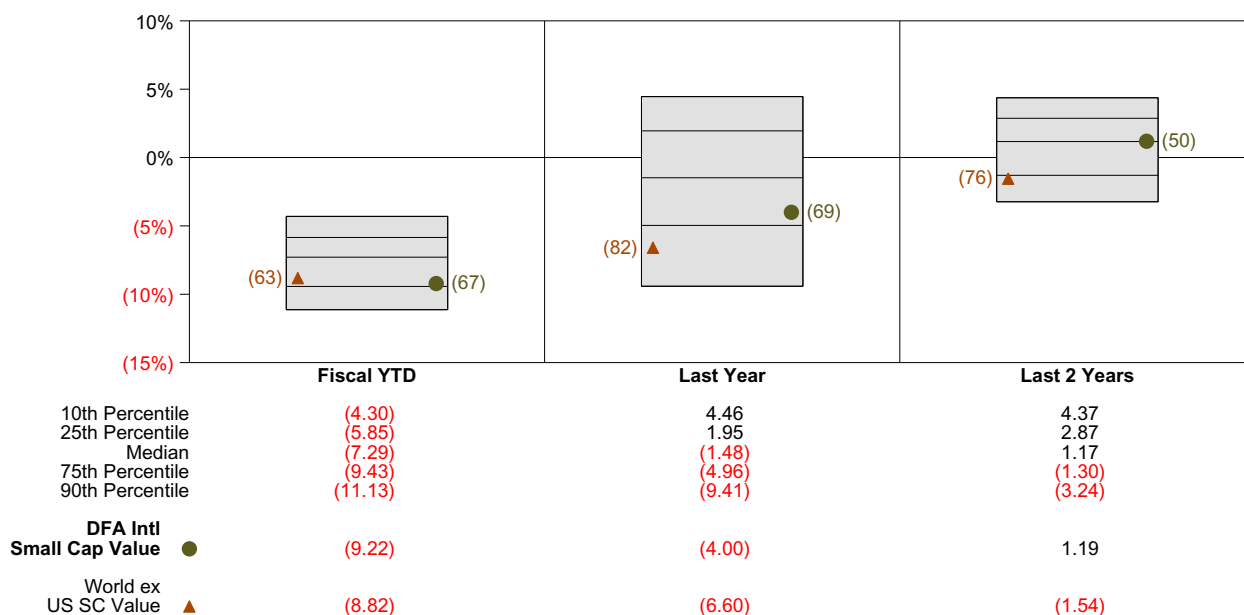
### Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a (9.22)% return for the quarter placing it in the 67 percentile of the MF - International Small Cap Obj group for the quarter and in the 69 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 0.40% for the quarter and outperformed the World ex US SC Value for the year by 2.59%.

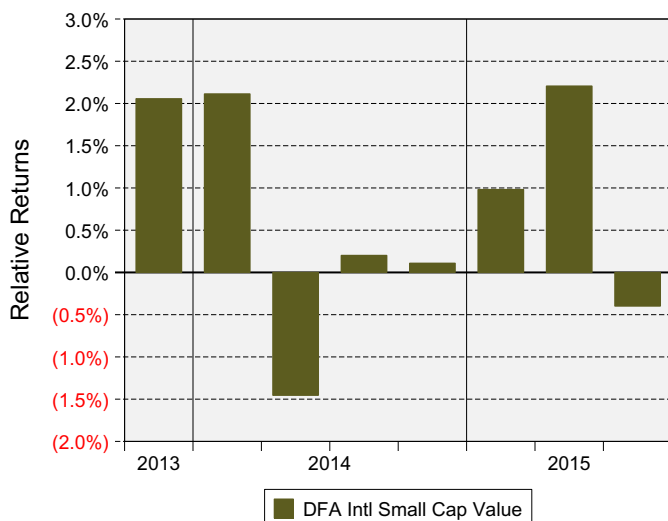
### Quarterly Asset Growth

Beginning Market Value	\$67,627,884
Net New Investment	\$0
Investment Gains/(Losses)	\$-6,233,720
Ending Market Value	\$61,394,164

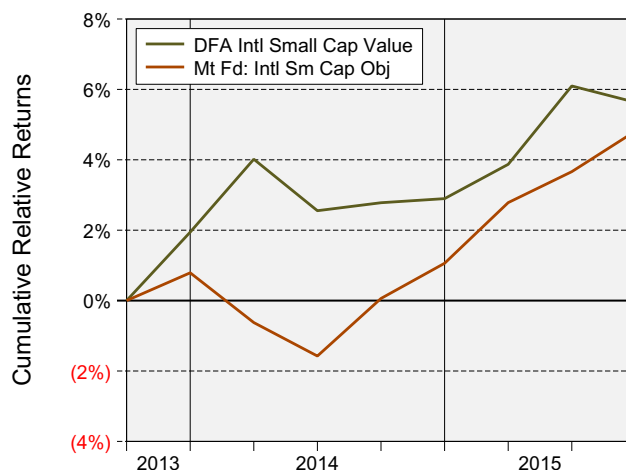
### Performance vs MF - International Small Cap Obj (Net)



### Relative Return vs World ex US SC Value



### Cumulative Returns vs World ex US SC Value



## LSV Intl Value Period Ended September 30, 2015

### Investment Philosophy

The objective of LSV Asset Management's International Large Cap Value strategy is to outperform the MSCI EAFE Index by at least 250 basis points (gross of fees) per annum over an annualized 3-5 year period with a tracking error of approximately 5-6%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 150 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested. LSV weights countries at a neutral weight relative to the benchmark country weights. 50% of the portfolio is US dollar hedged.

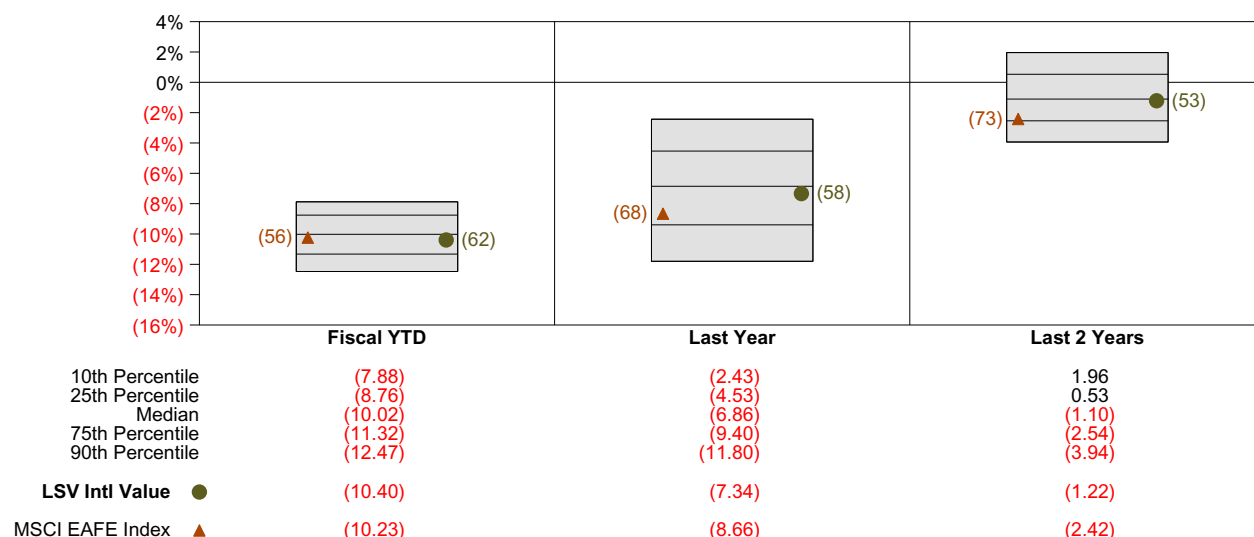
### Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a (10.40)% return for the quarter placing it in the 62 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 58 percentile for the last year.
- LSV Intl Value's portfolio underperformed the MSCI EAFE Index by 0.16% for the quarter and outperformed the MSCI EAFE Index for the year by 1.32%.

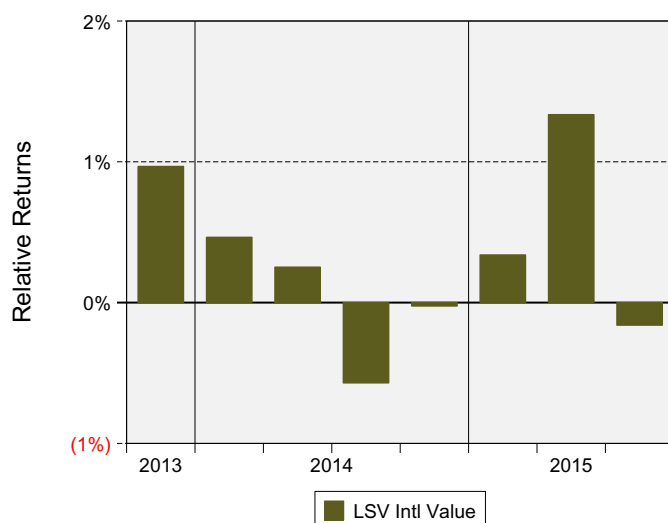
### Quarterly Asset Growth

Beginning Market Value	\$261,229,566
Net New Investment	\$20,743,367
Investment Gains/(Losses)	\$-28,743,114
Ending Market Value	\$253,229,819

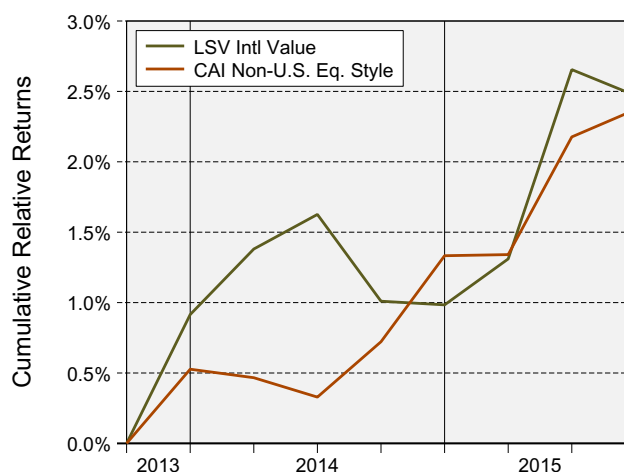
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI EAFE Index



### Cumulative Returns vs MSCI EAFE Index



# Vanguard Intl Explorer Fund

## Period Ended September 30, 2015

### Investment Philosophy

Vanguard International Explorer Fund invests primarily in the equity securities of small-capitalization companies located outside the United States that the advisor believes offer the potential for long-term capital appreciation. The advisor considers, among other things, whether a company is likely to have above-average earnings growth, whether the company's securities are attractively valued, and whether the company has any proprietary advantages.

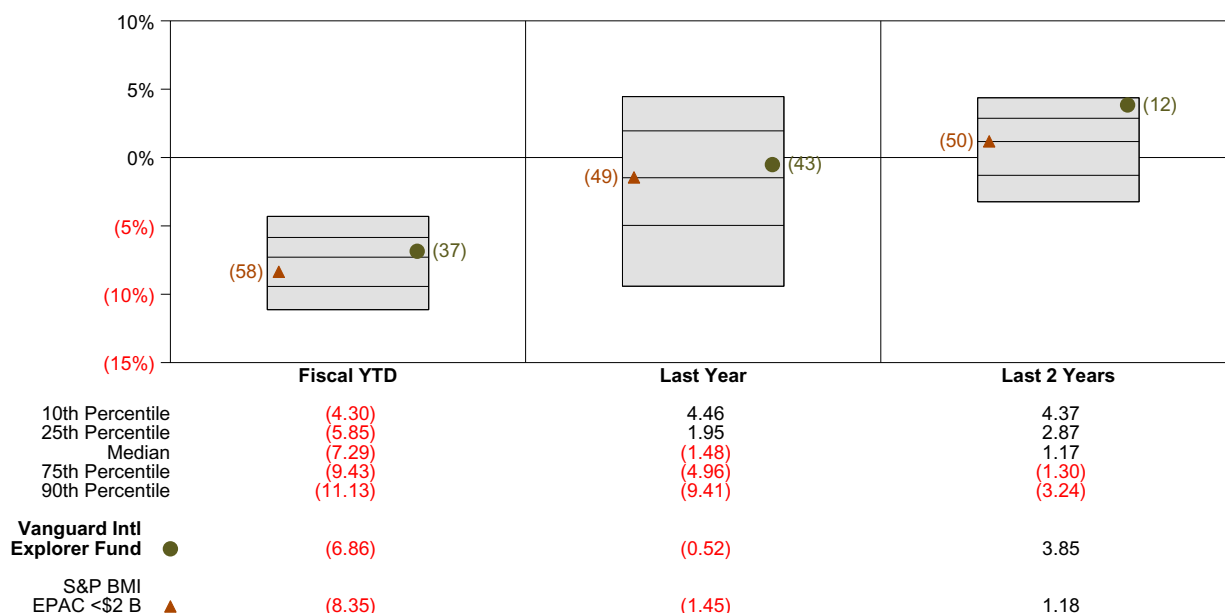
### Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a (6.86)% return for the quarter placing it in the 37 percentile of the MF - International Small Cap Obj group for the quarter and in the 43 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio outperformed the S&P BMI EPAC <\$2 B by 1.50% for the quarter and outperformed the S&P BMI EPAC <\$2 B for the year by 0.94%.

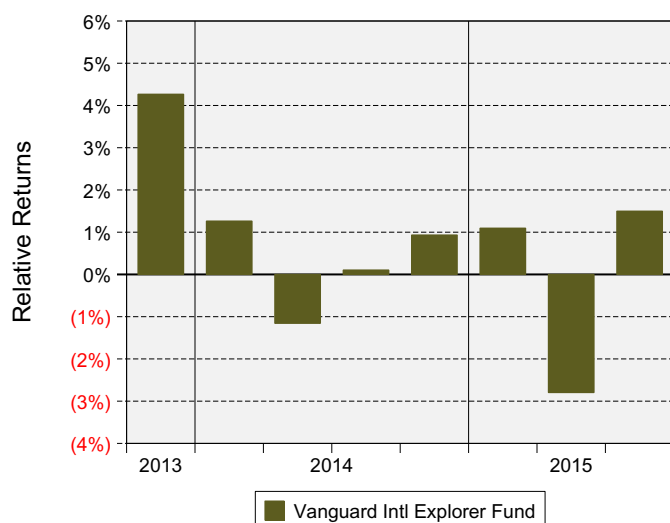
### Quarterly Asset Growth

Beginning Market Value	\$67,818,706
Net New Investment	\$0
Investment Gains/(Losses)	\$-4,650,213
Ending Market Value	\$63,168,493

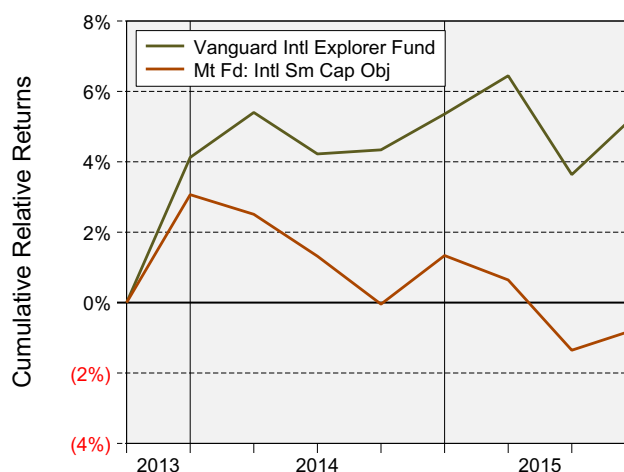
### Performance vs MF - International Small Cap Obj (Net)



### Relative Return vs S&P BMI EPAC <\$2 B



### Cumulative Returns vs S&P BMI EPAC <\$2 B







## Declaration Total Return Period Ended September 30, 2015

### Investment Philosophy

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

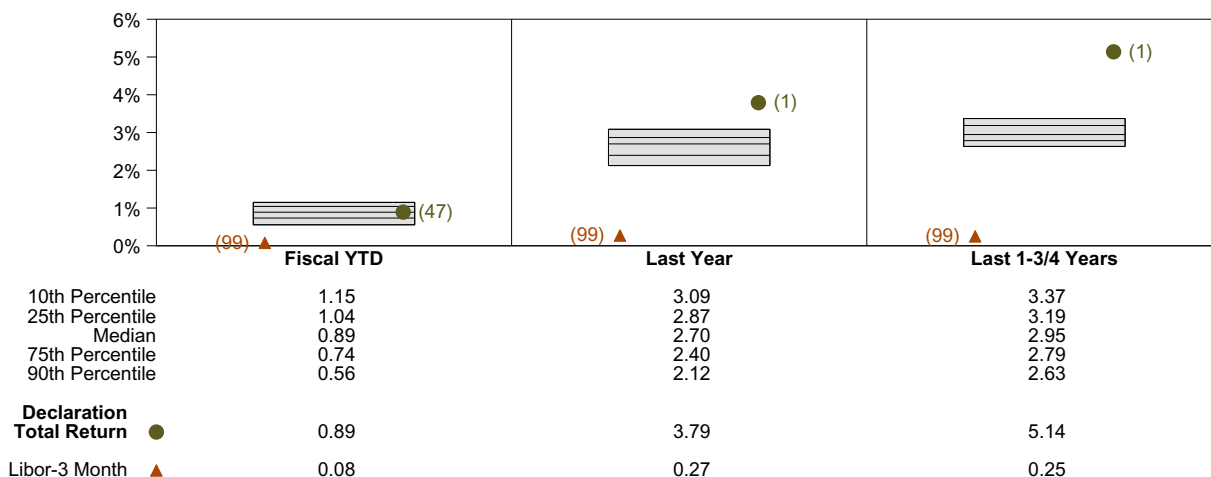
### Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 0.89% return for the quarter placing it in the 47 percentile of the CAI Intermediate Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 0.81% for the quarter and outperformed the Libor-3 Month for the year by 3.52%.

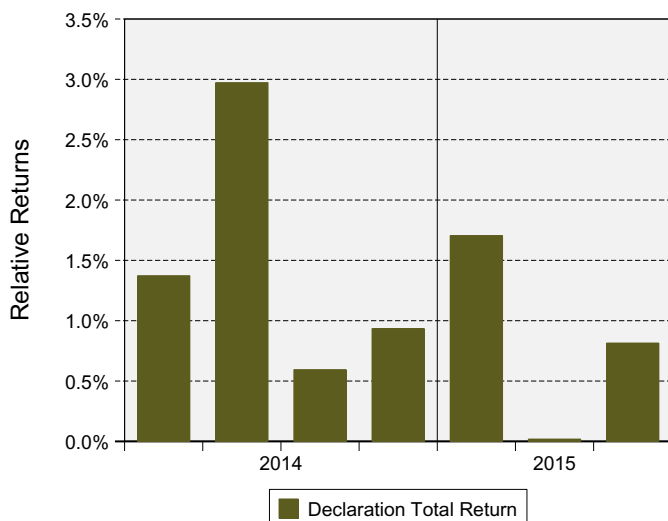
### Quarterly Asset Growth

Beginning Market Value	\$92,477,795
Net New Investment	\$8,168,863
Investment Gains/(Losses)	\$868,759
Ending Market Value	\$101,515,417

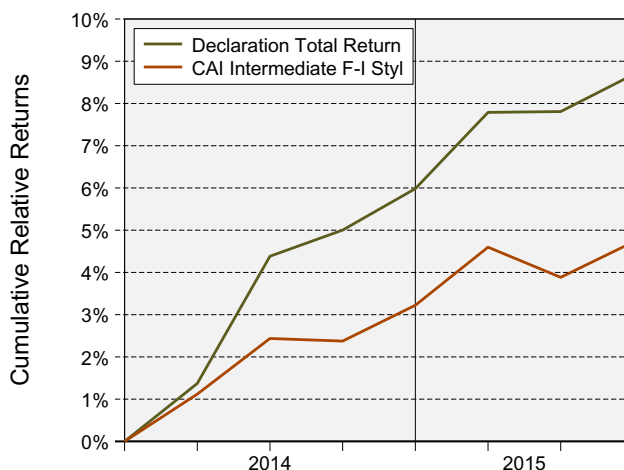
### Performance vs CAI Intermediate Fixed-Inc Style (Gross)



### Relative Return vs Libor-3 Month



### Cumulative Returns vs Libor-3 Month



## PIMCO DiSCO II

### Period Ended September 30, 2015

#### Investment Philosophy

The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

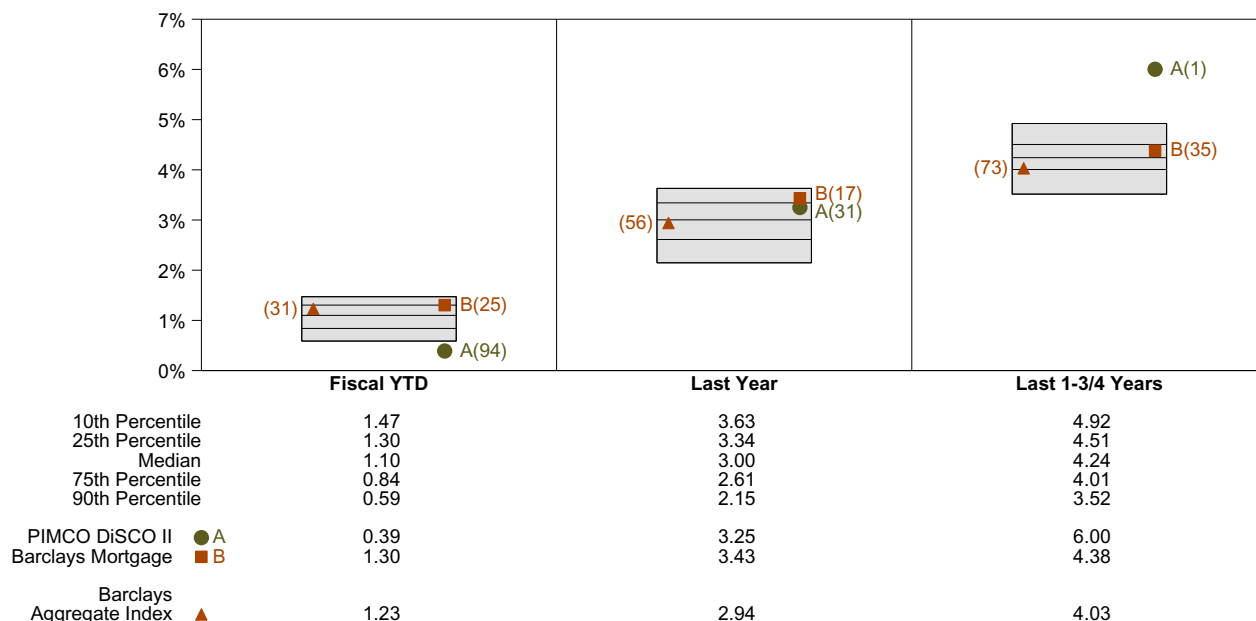
#### Quarterly Summary and Highlights

- PIMCO DiSCO II's portfolio posted a 0.39% return for the quarter placing it in the 94 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 31 percentile for the last year.
- PIMCO DiSCO II's portfolio underperformed the Barclays Aggregate Index by 0.84% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.31%.

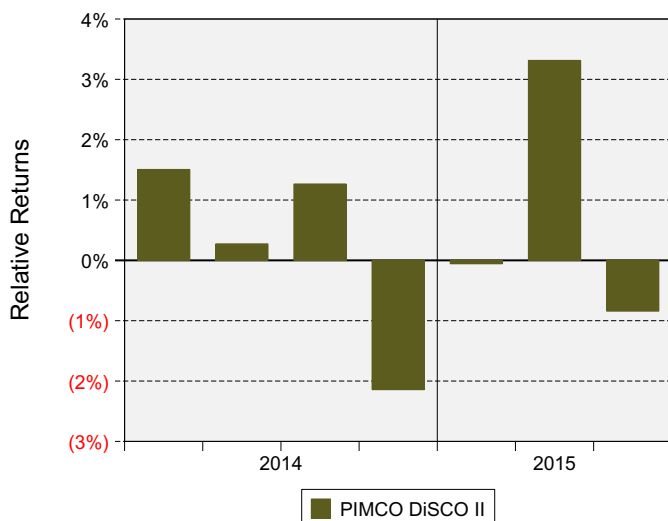
#### Quarterly Asset Growth

Beginning Market Value	\$41,544,199
Net New Investment	\$0
Investment Gains/(Losses)	\$162,100
Ending Market Value	\$41,706,299

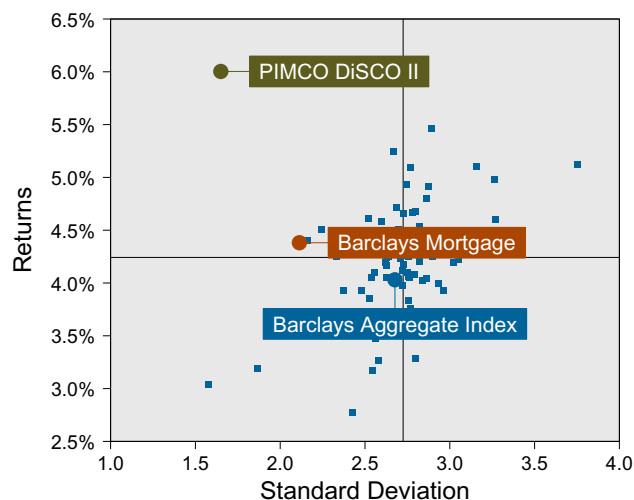
#### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



#### Relative Return vs Barclays Aggregate Index



#### CAI Core Bond Fixed-Inc Style (Gross) Annualized One and Three-Quarter Year Risk vs Return



## PIMCO Bravo II Fund

### Period Ended September 30, 2015

#### Investment Philosophy

The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

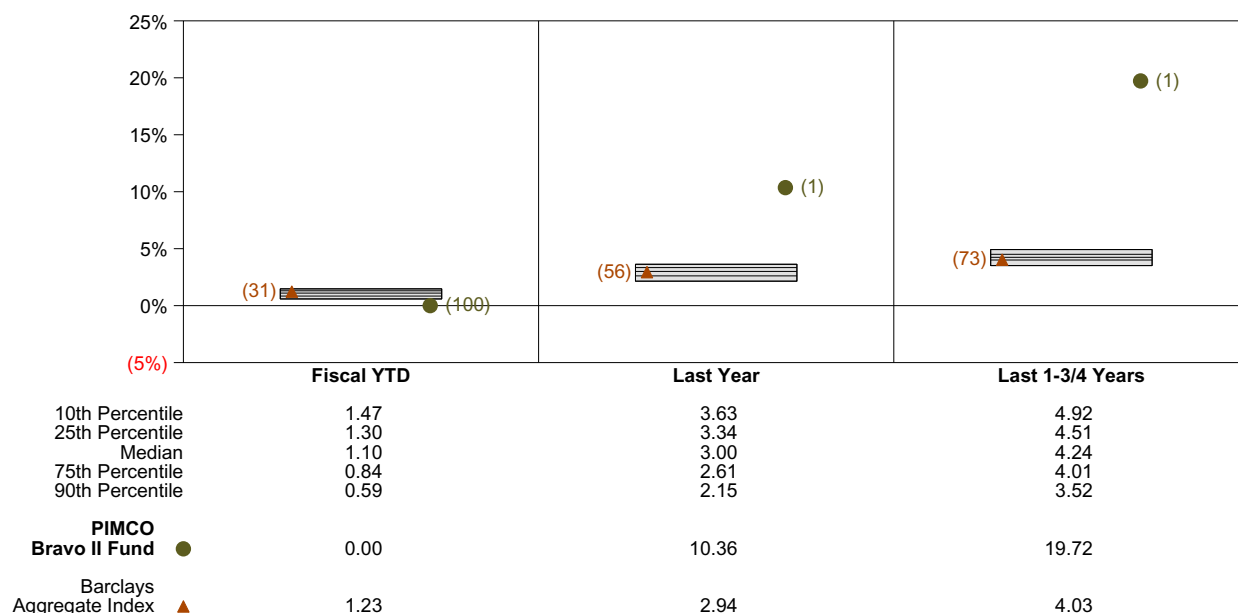
#### Quarterly Summary and Highlights

- PIMCO Bravo II Fund's portfolio posted a 0.00% return for the quarter placing it in the 100 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 1 percentile for the last year.
- PIMCO Bravo II Fund's portfolio underperformed the Barclays Aggregate Index by 1.23% for the quarter and outperformed the Barclays Aggregate Index for the year by 7.42%.

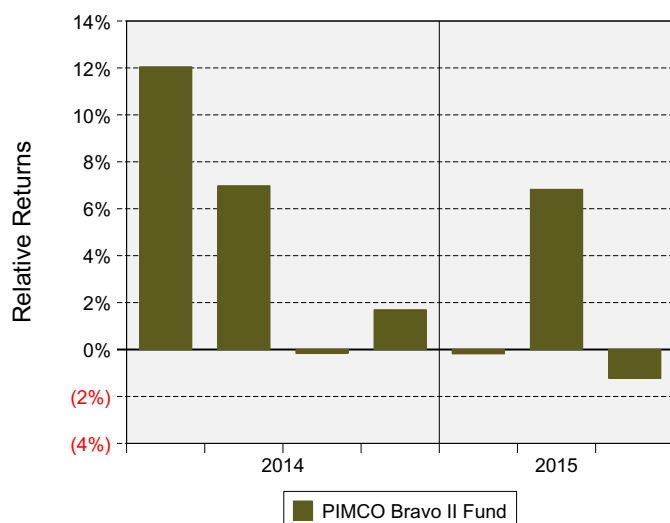
#### Quarterly Asset Growth

Beginning Market Value	\$18,611,691
Net New Investment	\$0
Investment Gains/(Losses)	\$0
Ending Market Value	\$18,611,691

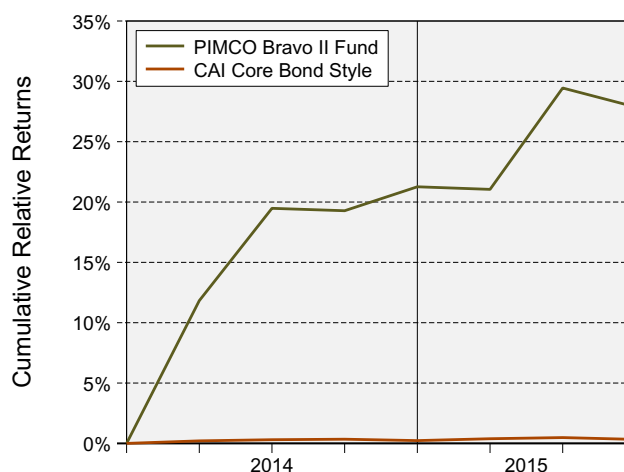
#### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



#### Relative Return vs Barclays Aggregate Index



#### Cumulative Returns vs Barclays Aggregate Index



## Prudential Period Ended September 30, 2015

### Investment Philosophy

The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.

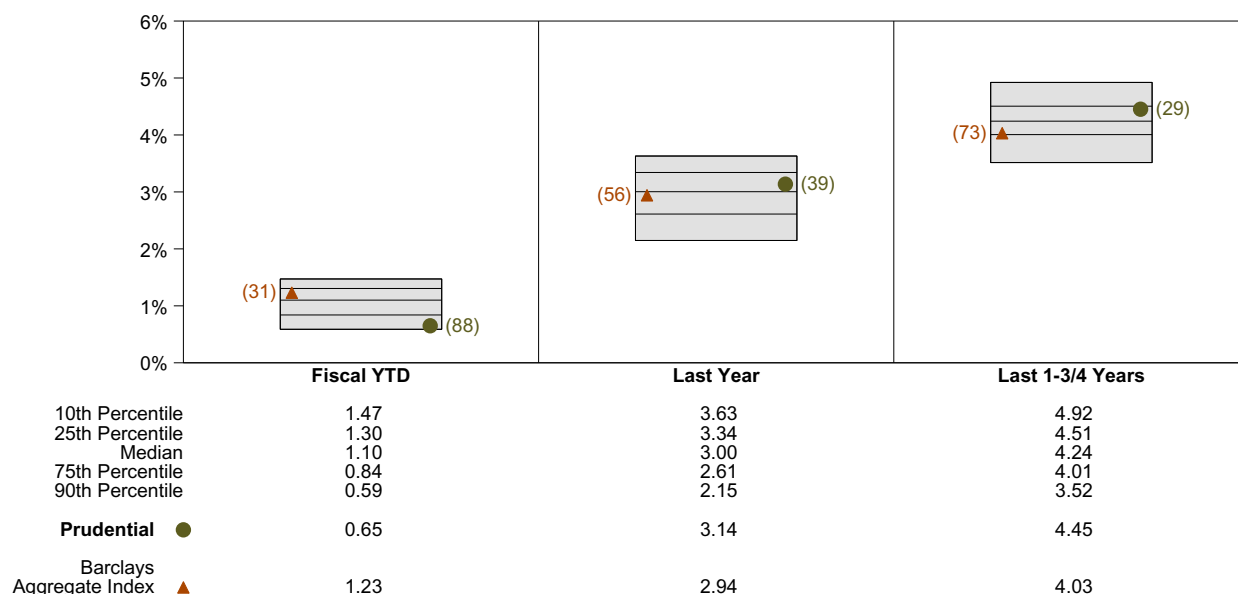
### Quarterly Summary and Highlights

- Prudential's portfolio posted a 0.65% return for the quarter placing it in the 88 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 39 percentile for the last year.
- Prudential's portfolio underperformed the Barclays Aggregate Index by 0.58% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.20%.

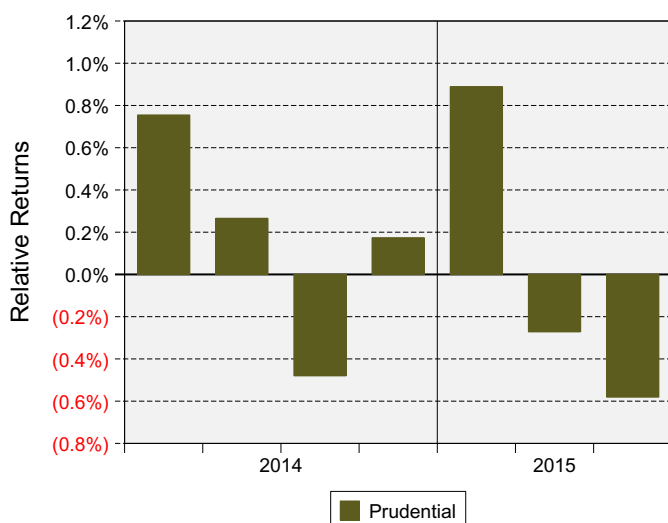
### Quarterly Asset Growth

Beginning Market Value	\$127,273,624
Net New Investment	\$1,912,350
Investment Gains/(Losses)	\$828,359
Ending Market Value	\$130,014,334

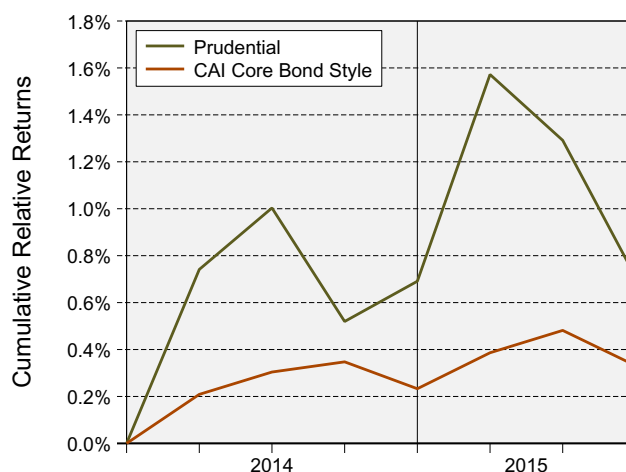
### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



### Relative Return vs Barclays Aggregate Index



### Cumulative Returns vs Barclays Aggregate Index



## SSgA US Govt Credit Bd Idx Period Ended September 30, 2015

### Investment Philosophy

The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Government/Credit Bond Index over the long term.

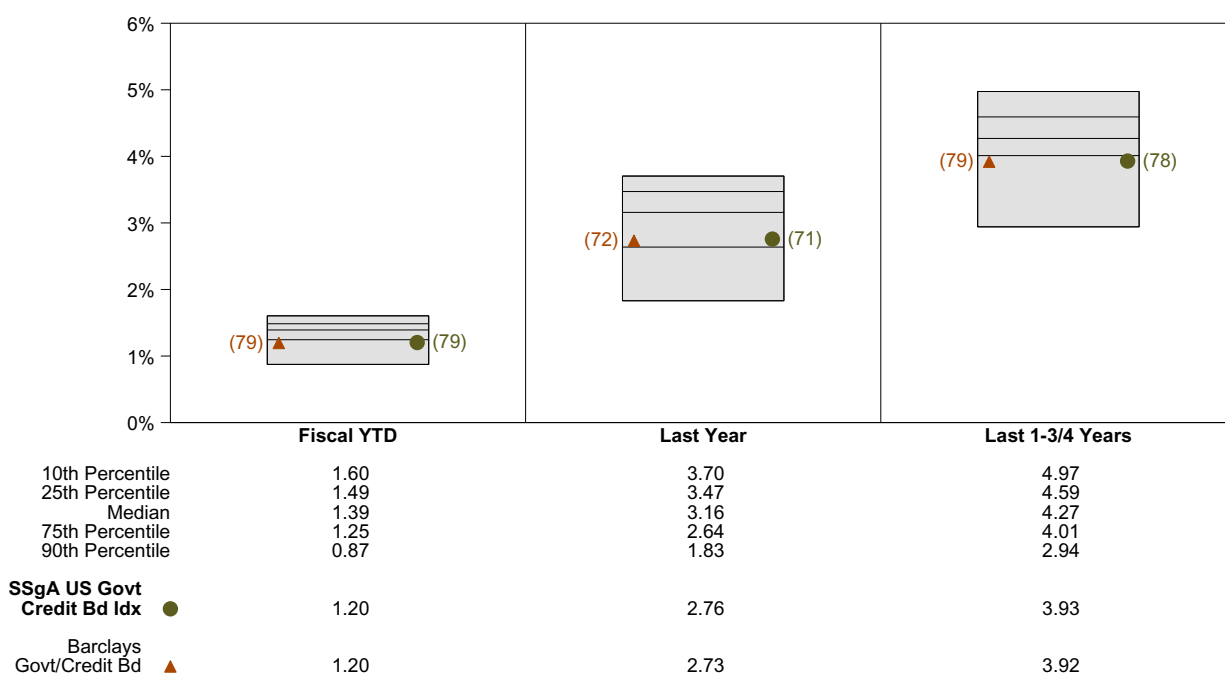
### Quarterly Summary and Highlights

- SSgA US Govt Credit Bd Idx's portfolio posted a 1.20% return for the quarter placing it in the 79 percentile of the CAI Govt/Credit Fixed-Income Style group for the quarter and in the 71 percentile for the last year.
- SSgA US Govt Credit Bd Idx's portfolio outperformed the Barclays Govt/Credit Bd by 0.01% for the quarter and outperformed the Barclays Govt/Credit Bd for the year by 0.02%.

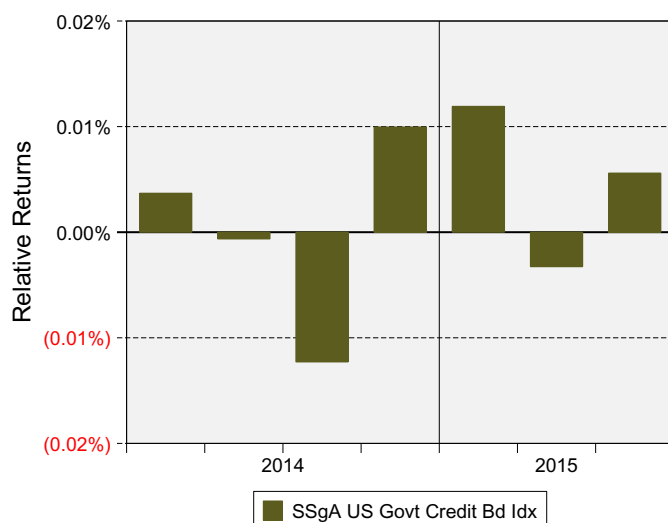
### Quarterly Asset Growth

Beginning Market Value	\$161,726,998
Net New Investment	\$7,086,539
Investment Gains/(Losses)	\$1,953,681
Ending Market Value	\$170,767,219

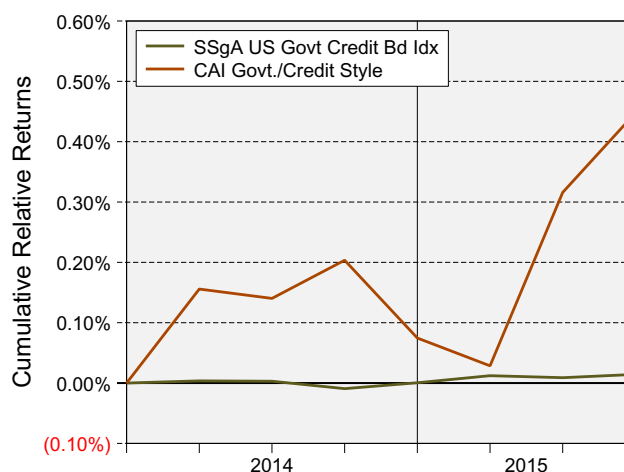
### Performance vs CAI Govt/Credit Fixed-Income Style (Gross)



### Relative Return vs Barclays Govt/Credit Bd



### Cumulative Returns vs Barclays Govt/Credit Bd



## Wells Capital Period Ended September 30, 2015

### Investment Philosophy

The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. The investment process for this fund starts with a "top-down" strategy. Security selection is determined by in-depth credit research, holding that in-depth knowledge of industries, companies, and their management teams can help identify credit trends that can lead to investment opportunities. Furthermore, a disciplined relative value framework is applied to help determine the optimal position to invest within an industry and within an individual issuer's capital structure.

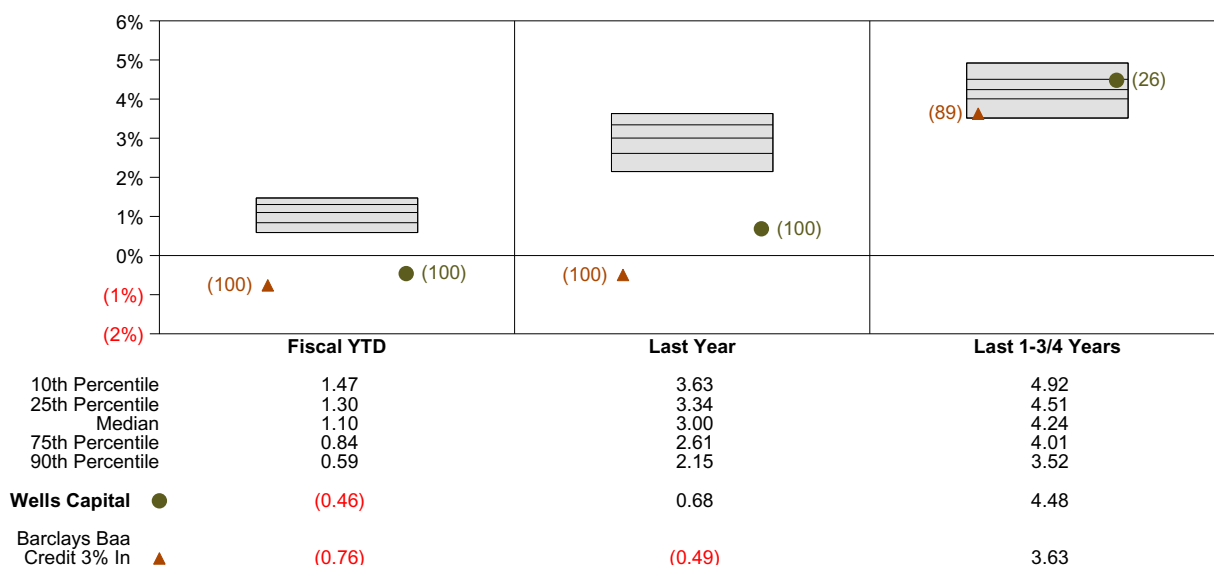
### Quarterly Summary and Highlights

- Wells Capital's portfolio posted a (0.46)% return for the quarter placing it in the 100 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 100 percentile for the last year.
- Wells Capital's portfolio outperformed the Barclays Baa Credit 3% In by 0.30% for the quarter and outperformed the Barclays Baa Credit 3% In for the year by 1.18%.

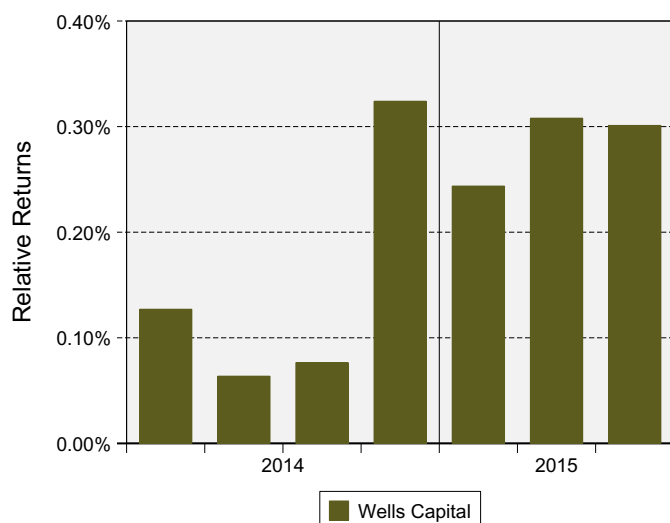
### Quarterly Asset Growth

Beginning Market Value	\$355,338,999
Net New Investment	\$17,238,465
Investment Gains/(Losses)	\$-1,705,603
Ending Market Value	\$370,871,861

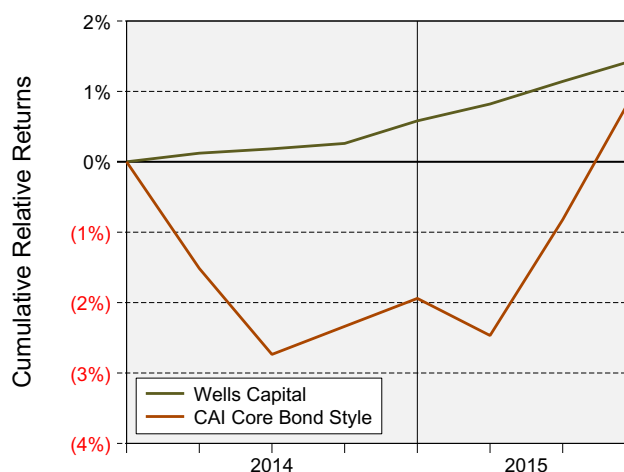
### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



### Relative Return vs Barclays Baa Credit 3% In



### Cumulative Returns vs Barclays Baa Credit 3% In



# Western Asset Management Company

## Period Ended September 30, 2015

### Investment Philosophy

Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

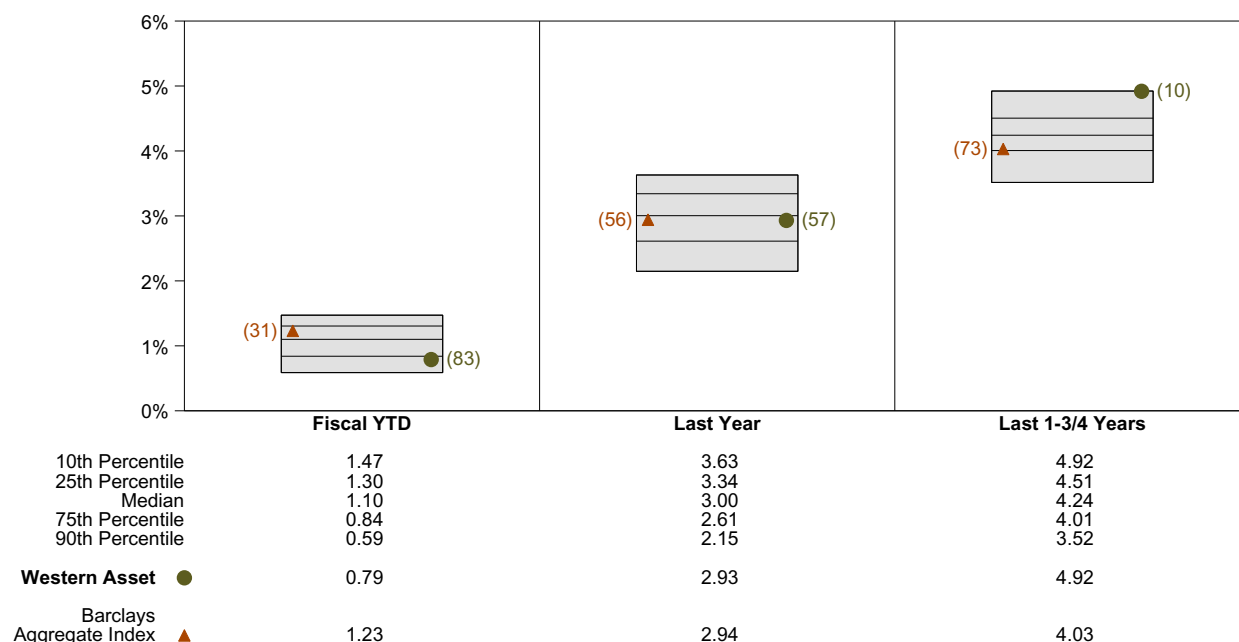
### Quarterly Summary and Highlights

- Western Asset's portfolio posted a 0.79% return for the quarter placing it in the 83 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 57 percentile for the last year.
- Western Asset's portfolio underperformed the Barclays Aggregate Index by 0.44% for the quarter and underperformed the Barclays Aggregate Index for the year by 0.01%.

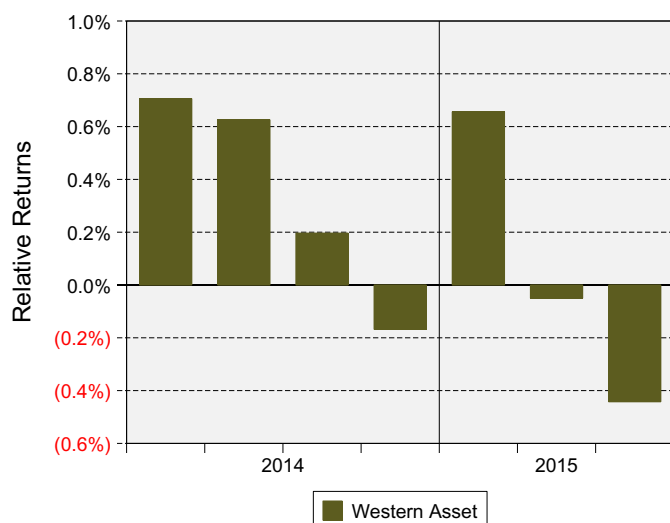
### Quarterly Asset Growth

Beginning Market Value	\$358,116,346
Net New Investment	\$15,576,984
Investment Gains/(Losses)	\$2,841,828
Ending Market Value	\$376,535,158

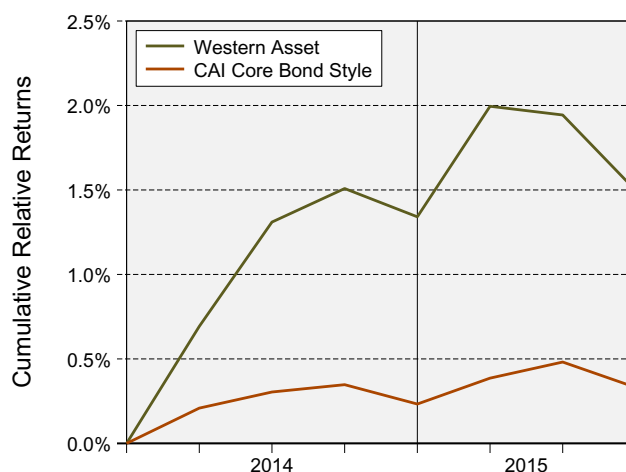
### Performance vs CAI Core Bond Fixed-Inc Style (Gross)



### Relative Return vs Barclays Aggregate Index



### Cumulative Returns vs Barclays Aggregate Index







## Western Asset TIPS Period Ended September 30, 2015

### Investment Philosophy

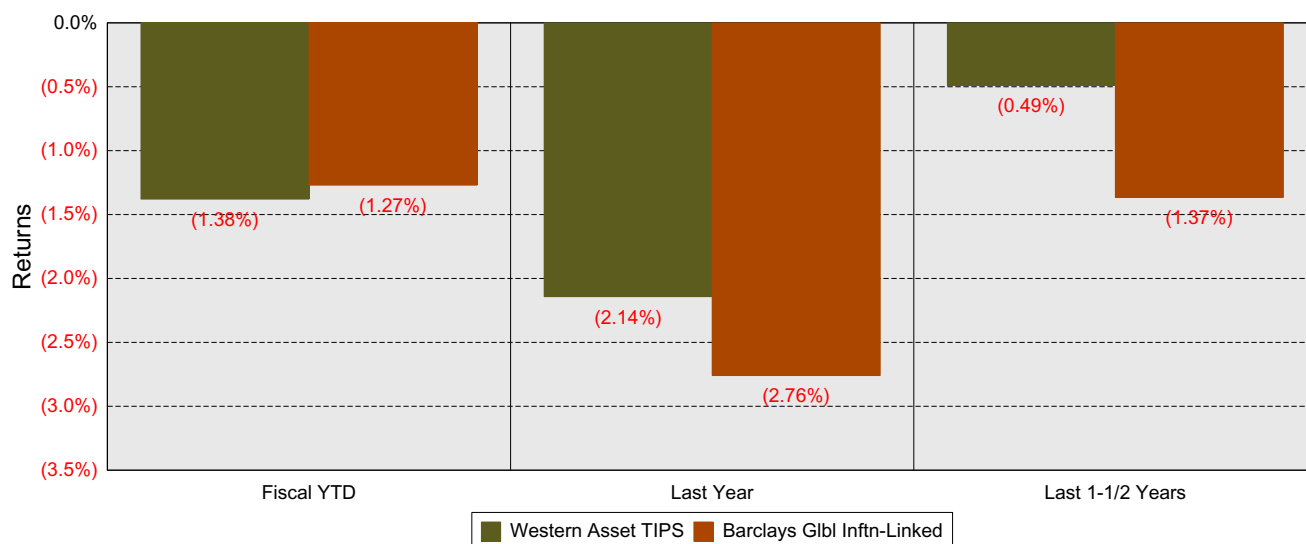
Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add value while minimizing risk. Value can be added through country selection, term structure, issue selection, duration management and currency management.

### Quarterly Summary and Highlights

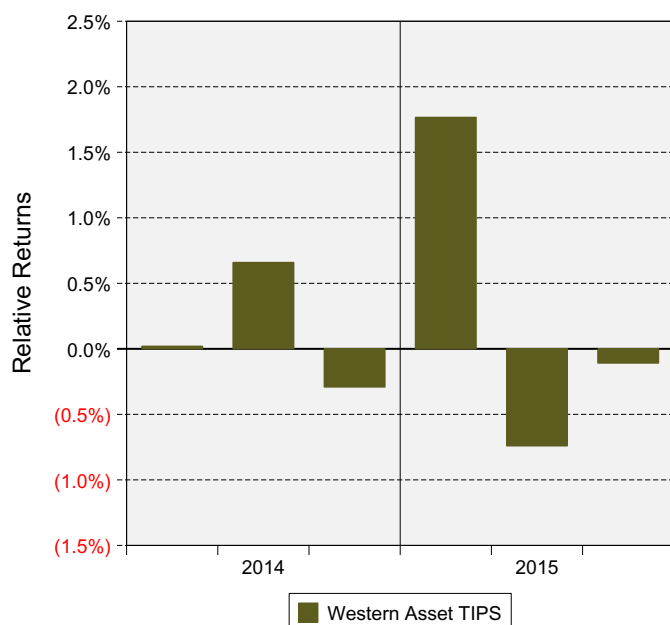
- Western Asset TIPS's portfolio underperformed the Barclays Gbl Infn-Linked by 0.11% for the quarter and outperformed the Barclays Gbl Infn-Linked for the year by 0.62%.

### Quarterly Asset Growth

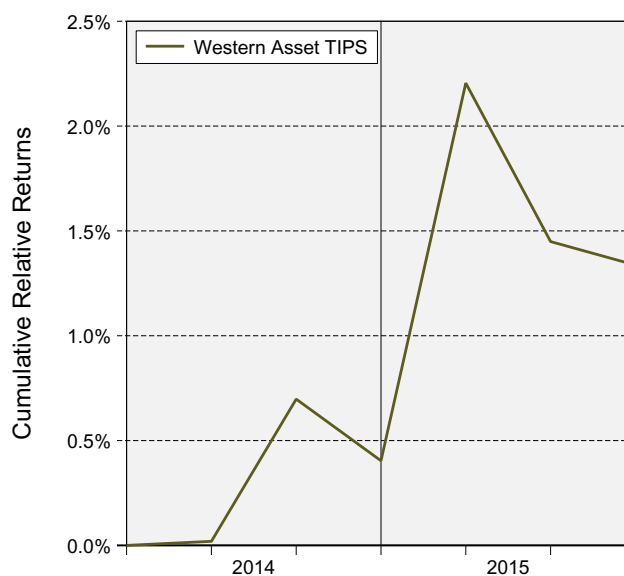
Beginning Market Value	\$255,623,447
Net New Investment	\$1,915,133
Investment Gains/(Losses)	\$-3,571,926
Ending Market Value	\$253,966,654



### Relative Return vs Barclays Gbl Infn-Linked



### Cumulative Returns vs Barclays Gbl Infn-Linked



## JP Morgan Infrastructure Period Ended September 30, 2015

### Investment Philosophy

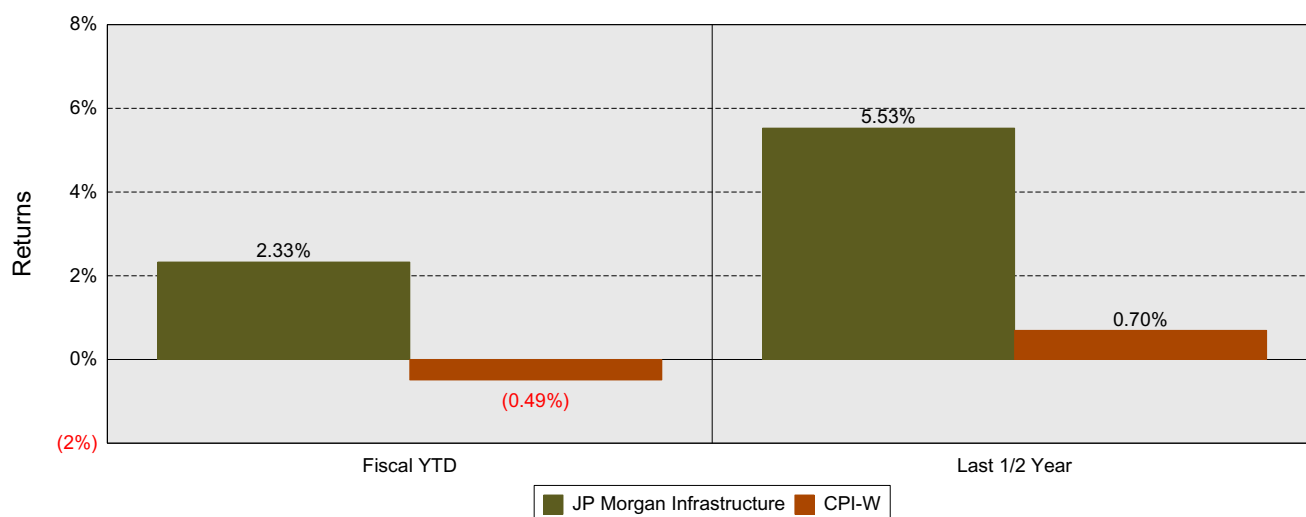
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

### Quarterly Summary and Highlights

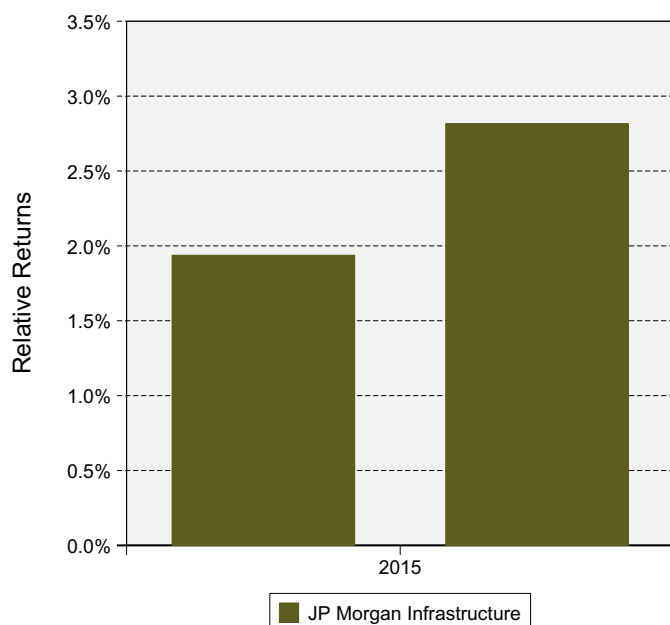
- JP Morgan Infrastructure's portfolio outperformed the CPI-W by 2.82% for the quarter and outperformed the CPI-W for the one-half year by 4.83%.

### Quarterly Asset Growth

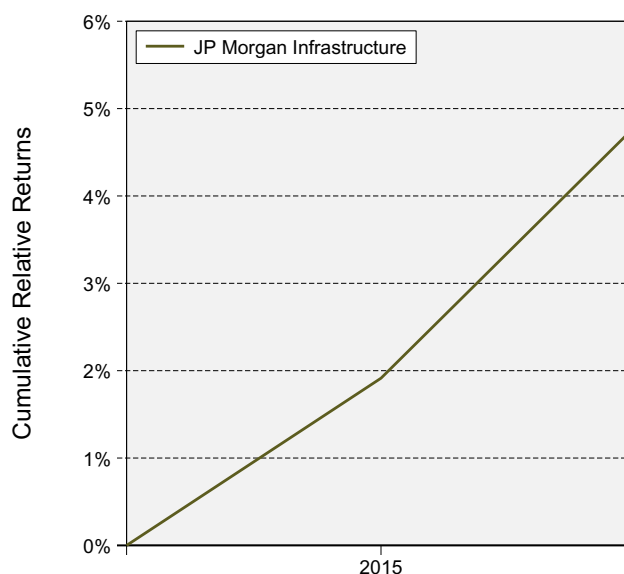
Beginning Market Value	\$77,344,865
Net New Investment	\$-206,832
Investment Gains/(Losses)	\$1,800,092
Ending Market Value	\$78,938,124



### Relative Return vs CPI-W



### Cumulative Returns vs CPI-W



## Grosvenor Cust. Infrastructure Period Ended September 30, 2015

### Investment Philosophy

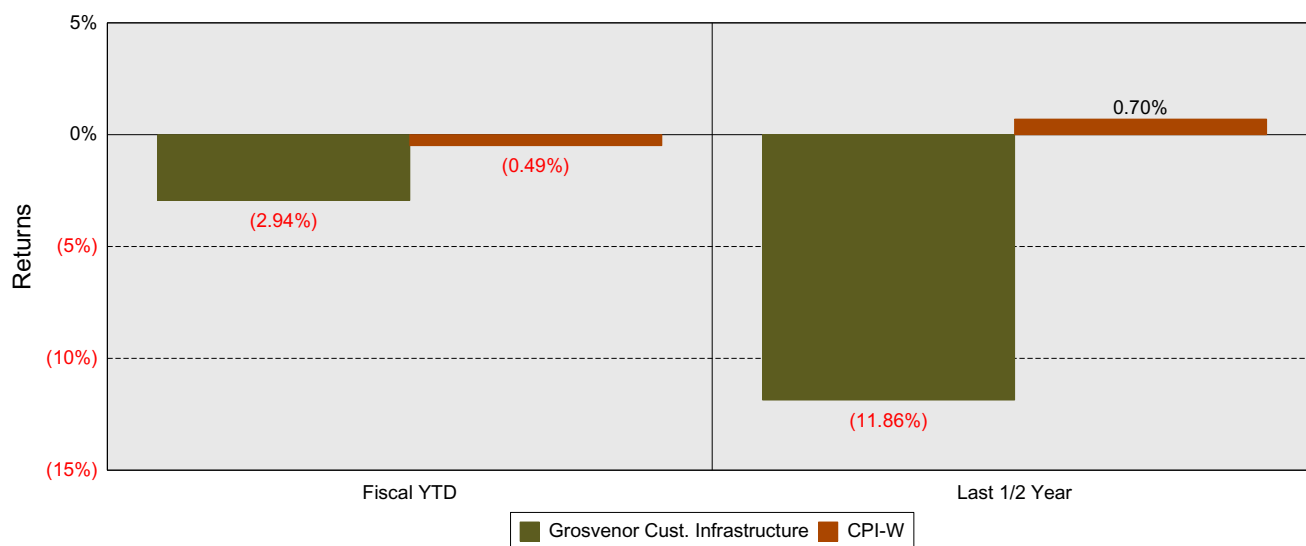
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

### Quarterly Summary and Highlights

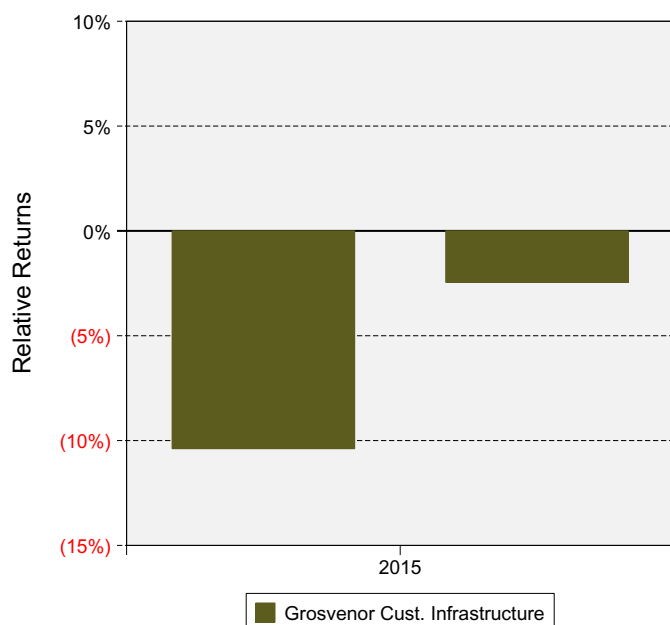
- Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 2.45% for the quarter and underperformed the CPI-W for the one-half year by 12.56%.

### Quarterly Asset Growth

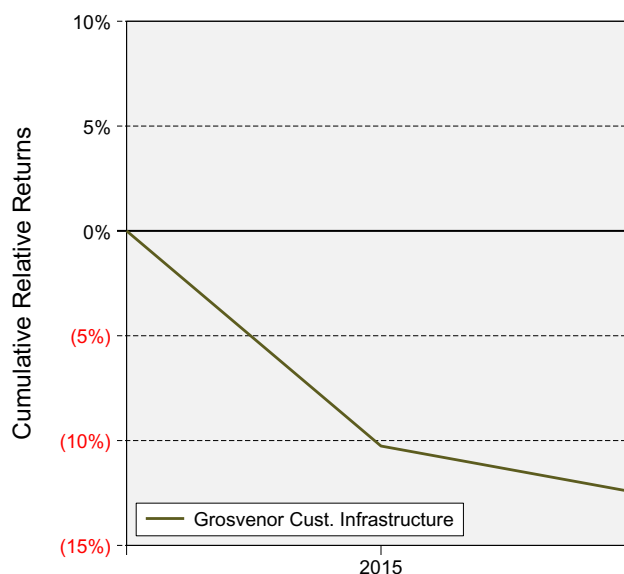
Beginning Market Value	\$3,825,215
Net New Investment	\$7,308,272
Investment Gains/(Losses)	\$-235,508
Ending Market Value	\$10,897,979



### Relative Return vs CPI-W



### Cumulative Returns vs CPI-W





# Invesco Core Real Estate

## Period Ended September 30, 2015

### Investment Philosophy

IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

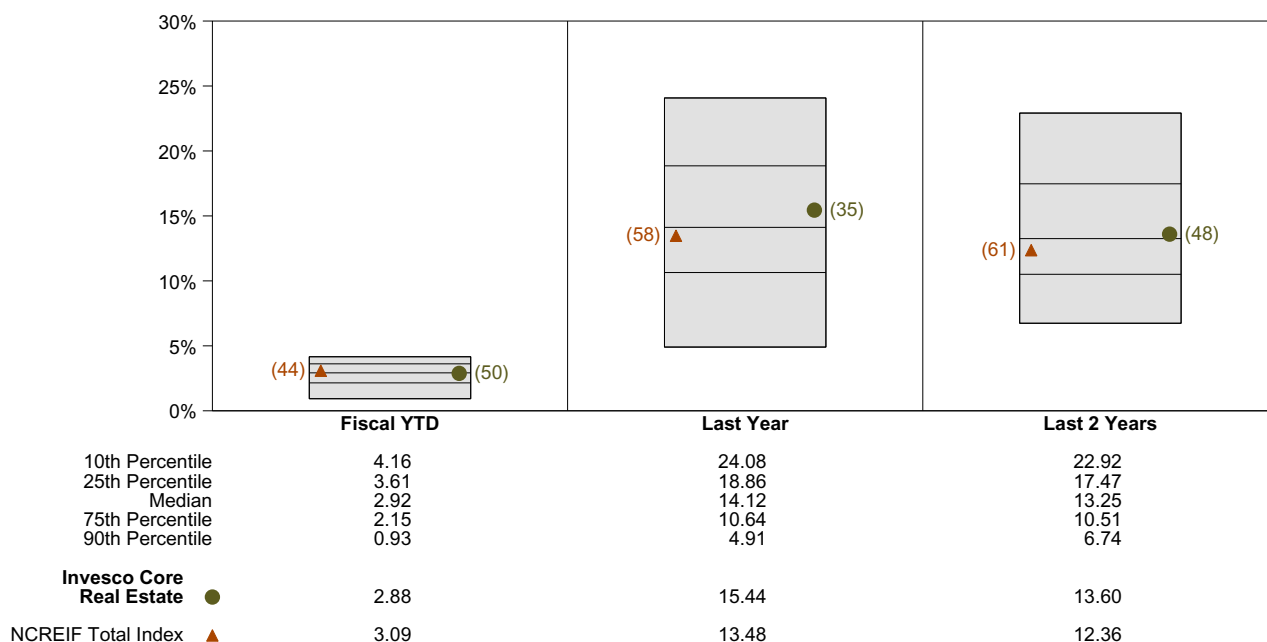
### Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 2.88% return for the quarter placing it in the 50 percentile of the Total Real Estate DB group for the quarter and in the 35 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF Total Index by 0.21% for the quarter and outperformed the NCREIF Total Index for the year by 1.97%.

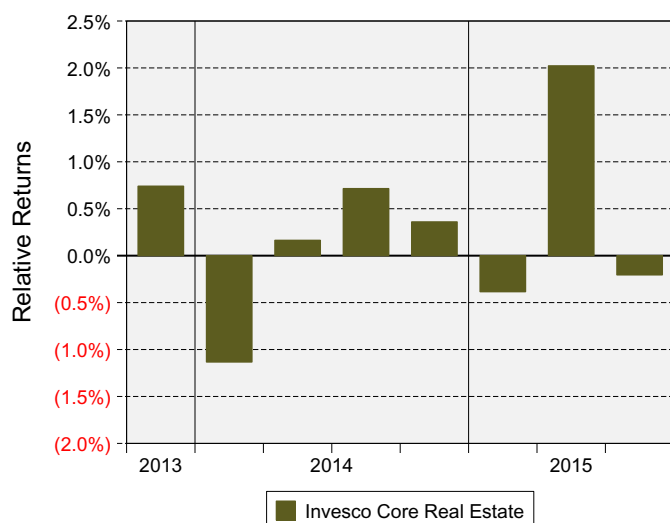
### Quarterly Asset Growth

Beginning Market Value	\$85,766,269
Net New Investment	\$7,000,000
Investment Gains/(Losses)	\$2,673,260
Ending Market Value	\$95,439,529

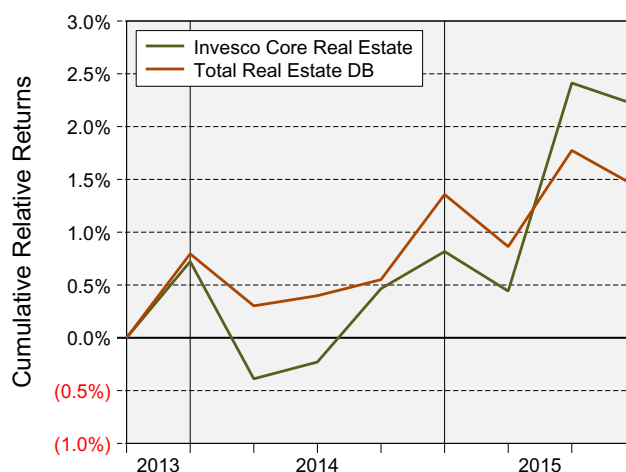
### Performance vs Total Real Estate DB (Net)



### Relative Return vs NCREIF Total Index



### Cumulative Returns vs NCREIF Total Index



## JP Morgan RE Inc & Growth Period Ended September 30, 2015

### Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

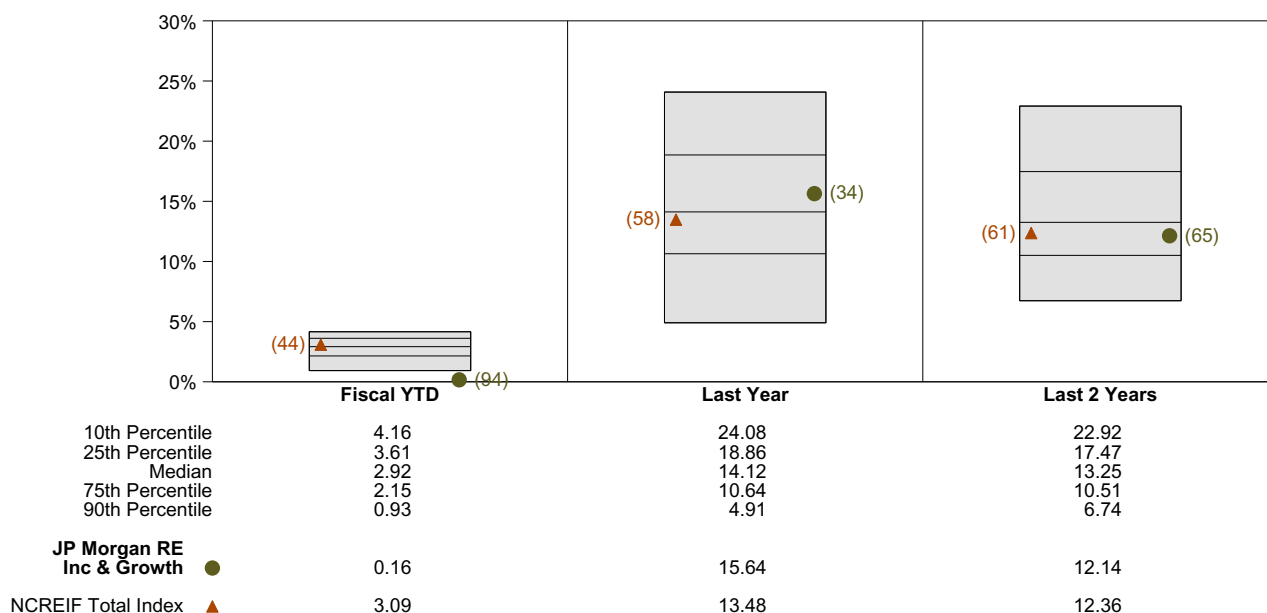
### Quarterly Summary and Highlights

- JP Morgan RE Inc & Growth's portfolio posted a 0.16% return for the quarter placing it in the 94 percentile of the Total Real Estate DB group for the quarter and in the 34 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio underperformed the NCREIF Total Index by 2.92% for the quarter and outperformed the NCREIF Total Index for the year by 2.16%.

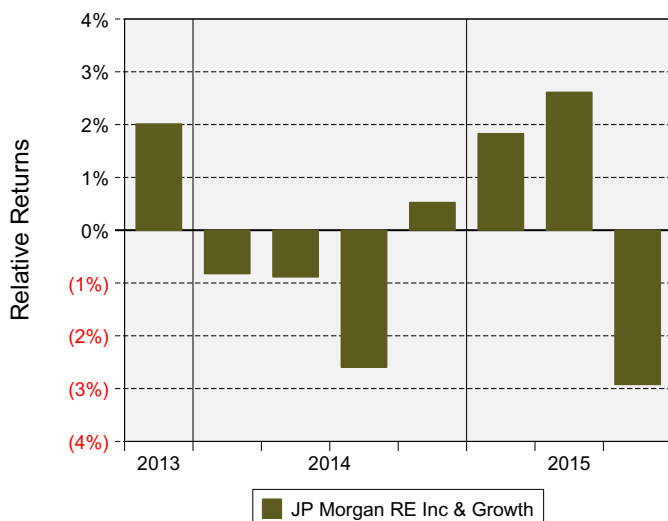
### Quarterly Asset Growth

Beginning Market Value	\$89,369,907
Net New Investment	\$-88,152
Investment Gains/(Losses)	\$146,437
Ending Market Value	\$89,428,192

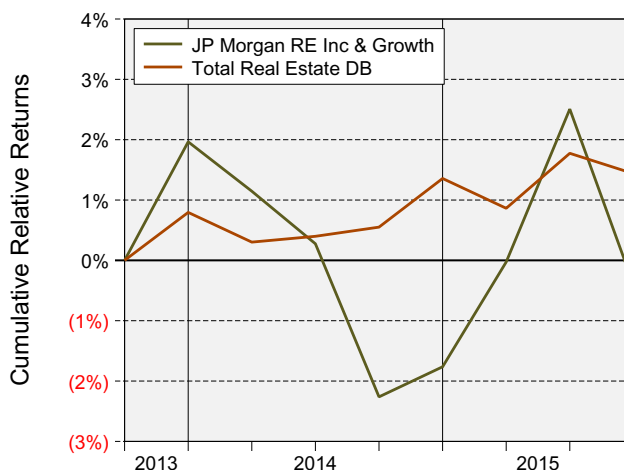
### Performance vs Total Real Estate DB (Net)



### Relative Return vs NCREIF Total Index



### Cumulative Returns vs NCREIF Total Index







## Research and Educational Programs

The Callan Investments Institute provides research that keeps clients updated on the latest industry trends while helping them learn through carefully structured educational programs.

### Recent Research

Please visit [www.callan.com/research](http://www.callan.com/research) to see all of our publications.

**Fixed Income Benchmark Review** This annual report compares characteristics for Barclays, Citi, Credit Suisse, and JP Morgan fixed income indices versus various Callan Manager peer groups.

**Real Indicators: The Metrics of Real Estate** In this video, Avery Robinson, CAIA, discusses the development of real estate indicator metrics and what they say about the current market.

**The Education of Beta Video** Eugene Podkaminer, CFA, describes the reasons he decided to explore the topic of “smart beta”.



**The Education of Beta: Can Alternative Indexes Make Your Portfolio Smarter?** Reprinted in the Journal of Investing, Eugene Podkaminer explores how “smart beta” strategies are put together, how they have performed over the past decade, and how they can be used by investors.

**Real Assets Reporter, Summer/Fall 2015** Data and insights on real estate and other real asset investment topics, including listed infrastructure.

**Target Date Funds: Finding the Right Vehicle for the Road to Retirement** Author Jimmy Veneruso presents key findings and highlights some questions plan sponsors may consider when evaluating target date funds.

**Hedge Fund Monitor, 2nd Quarter 2015** Author Jim McKee's essay, Zen and the Art of Selling Short, including quarterly performance provides a snapshot of the asset class.

**Private Markets Trends, Summer 2015** Gary Robertson summarizes the market environment, recent events, performance, and other issues involving private equity.

**DC Observer, 2nd Quarter 2015** Cover story: What Do You See Through the Brokerage Window? Plus the Callan DC Index™.

**Summary, June Workshop: Fiduciary Tidal Wave, Navigating DC's Uncharted Waters** Shared observations from Callan's 2015 *DC Trends Survey*, client experiences, and case studies.

**Capital Market Review, 2nd Quarter 2015** Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

**Inside Callan's Database, 2nd Quarter 2015** This report graphs performance and risk data from Callan's proprietary database alongside relevant market indices.



**Beating the Heat: Five Best Practices for Endowments and Foundations** Ellen Brownell presents five ways endowments and foundations can keep their cool when asset allocation conversations heat up.

**2015 Nuclear Decommissioning Funding Study** Author Julia Moriarty covers power utilities with an ownership interest in the operating and non-operating nuclear reactors in the U.S.

## Events

Did you miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: <https://www.callan.com/education/CII/>



The **October Regional Workshop**, to be held October 21 in New York and October 22 in Atlanta, looks at where **Real Assets Meet the Real World**. In this workshop, we look at real assets' various roles in institutional portfolios. We dive into the challenges that arise during implementation—challenges as unique as investors themselves.

Also, save the date for our annual **National Conference** in San Francisco, January 25-27, 2016.

**For more information about research or educational events, please contact Anna West: 415.974.5060 / [institute@callan.com](mailto:institute@callan.com)**

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next session is:

### Introduction to Investments

*Chicago, October 27-28, 2015*

*2016 dates TBD, please check our website for updates*

This session familiarizes fund sponsor trustees, staff, and asset management advisors with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### Customized Sessions

The “Callan College” is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

**Learn more at <https://www.callan.com/education/college/> or contact Kathleen Cunnie: 415.274.3029 / [cunnie@callan.com](mailto:cunnie@callan.com)**

## Education: By the Numbers

**500**

Attendees (on average) of the Institute's annual National Conference

**50+**

Unique pieces of research the Institute generates each year

**3,300**

Total attendees of the “Callan College” since 1994

**1980**

Year the Callan Investments Institute was founded



“We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years.”

Ron Peyton, Chairman and CEO



## List of Managers That Do Business with Callan Associates Inc.

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Manager Name	Educational Services	Consulting Services
1607 Capital Partners, LLC		Y
Aberdeen Asset Management	Y	Y
Acadian Asset Management, Inc.	Y	
Advisory Research	Y	
Affiliated Managers Group		Y
AllianceBernstein	Y	
Allianz Global Investors U.S. LLC	Y	Y
Allianz Life Insurance Company of North America		Y
Altrinsic Global Advisors, LLC		Y
American Century Investment Management	Y	
Analytic Investors	Y	
Apollo Global Management	Y	
AQR Capital Management	Y	
Ares Management	Y	
Ariel Investments	Y	
Aristotle Capital Management	Y	
Aronson + Johnson + Ortiz	Y	
Artisan Holdings		Y
Atlanta Capital Management Co., L.L.C.	Y	Y
Aviva Investors	Y	
AXA Rosenberg Investment Management	Y	
Babson Capital Management LLC	Y	
Baillie Gifford International LLC	Y	Y
Baird Advisors	Y	Y
Bank of America		Y
Baring Asset Management	Y	
Baron Capital Management	Y	
BlackRock	Y	
BMO Asset Management	Y	
BNP Paribas Investment Partners	Y	
BNY Mellon Asset Management	Y	Y
Boston Company Asset Management, LLC (The)	Y	Y

## List of Managers That Do Business with Callan Associates Inc. (continued)

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Manager Name	Educational Services	Consulting Services
Boston Partners	Y	Y
Brandes Investment Partners, L.P.	Y	Y
Brandywine Global Investment Management, LLC	Y	
Brown Brothers Harriman & Company	Y	
Cadence Capital Management	Y	
Capital Group	Y	
CastleArk Management, LLC		Y
Causeway Capital Management	Y	
Central Plains Advisors, Inc.		Y
Chartwell Investment Partners	Y	
ClearBridge Investments, LLC (fka ClearBridge Advisors)	Y	
Cohen & Steers	Y	Y
Columbia Management Investment Advisors, LLC	Y	Y
Columbus Circle Investors	Y	Y
Corbin Capital Partners	Y	
Cornerstone Investment Partners, LLC	Y	
Cramer Rosenthal McGlynn, LLC	Y	
Crawford Investment Council		Y
Credit Suisse Asset Management	Y	
Crestline Investors	Y	Y
Cutwater Asset Management	Y	
DB Advisors	Y	Y
DE Shaw Investment Management LLC	Y	
Delaware Investments	Y	Y
DePrince, Race & Zollo, Inc.	Y	Y
Deutsche Asset & Wealth Management	Y	Y
Diamond Hill Investments	Y	
Donald Smith & Co., Inc.	Y	
DSM Capital Partners		Y
Duff & Phelps Investment Mgmt.	Y	Y
Eagle Asset Management, Inc.		Y
EARNEST Partners, LLC	Y	
Eaton Vance Management	Y	Y
Epoch Investment Partners	Y	
Fayez Sarofim & Company		Y
Federated Investors	Y	Y
Fir Tree Partners	Y	
First Eagle Investment Management	Y	
First Hawaiian Bank		Y
First State Investments	Y	
Fisher Investments	Y	
Franklin Templeton	Y	Y

## List of Managers That Do Business with Callan Associates Inc. (continued)

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Manager Name	Educational Services	Consulting Services
Fred Alger Management Co., Inc.	Y	
Fuller & Thaler Asset Management	Y	
GAM (USA) Inc.	Y	
Garcia Hamilton & Associates	Y	
GE Asset Management	Y	Y
Geneva Capital Management	Y	
Goldman Sachs Asset Management	Y	Y
Grand-Jean Capital Management	Y	Y
GMO (fka Grantham, Mayo, Van Otterloo & Co., LLC)	Y	
Great Lakes Advisors, Inc.		Y
The Guardian Life Insurance Company of America		Y
Guggenheim Investments Asset Management (fka Security Global)	Y	
The Hampshire Companies	Y	
Harbor Capital		Y
Hartford Funds	Y	
Hartford Investment Management Co.	Y	Y
Heightman Capital Management Corporation		Y
Henderson Global Investors	Y	Y
Hotchkis & Wiley	Y	
HSBC Global Asset Management	Y	
Income Research & Management	Y	
Insight Investment Management		Y
Institutional Capital LLC	Y	
INTECH Investment Management	Y	
Invesco	Y	Y
Investec Asset Management	Y	
Jacobs Levy Equity Management		Y
Janus Capital Group (fka Janus Capital Management, LLC)	Y	Y
Jensen Investment Management		Y
J.M. Hartwell	Y	
J.P. Morgan Asset Management	Y	Y
KeyCorp		Y
Lazard Asset Management	Y	Y
LMCG Investments (fka Lee Munder Capital Group)	Y	
Legal & General Investment Management America	Y	
Lincoln National Corporation		Y
Logan Circle Partners, L.P.	Y	
The London Company	Y	
Longview Partners	Y	
Loomis, Sayles & Company, L.P.	Y	Y
Lord Abbett & Company	Y	Y
Los Angeles Capital Management	Y	

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Manager Name	Educational Services	Consulting Services
LSV Asset Management	Y	
Lyrical Partners	Y	
MacKay Shields LLC	Y	Y
Man Investments	Y	
Manulife Asset Management	Y	
Martin Currie	Y	
Marvin & Palmer Associates, Inc.	Y	
MFS Investment Management	Y	Y
MidFirst Bank		Y
Mondrian Investment Partners Limited	Y	Y
Montag & Caldwell, Inc.	Y	Y
Morgan Stanley Alternative Investment Partners	Y	
Morgan Stanley Investment Management	Y	Y
Mount Lucas Management LP	Y	
Mountain Lake Investment Management LLC		Y
MUFG Union Bank, N.A.		Y
Neuberger Berman, LLC (fka, Lehman Brothers)	Y	Y
Newton Capital Management	Y	
Northern Lights Capital Group		Y
Northern Trust Global Investment Services	Y	Y
Nuveen Investments Institutional Services Group LLC	Y	
Old Mutual Asset Management	Y	Y
OppenheimerFunds, Inc.	Y	
Pacific Investment Management Company	Y	
Palisade Capital Management LLC	Y	
Paradigm Asset Management	Y	
Parametric Portfolio Associates	Y	
Peregrine Capital Management, Inc.	Y	Y
Philadelphia International Advisors, LP	Y	
PineBridge Investments (formerly AIG)	Y	
Pinnacle Asset Management	Y	
Pioneer Investment Management, Inc.	Y	
PNC Capital Advisors (fka Allegiant Asset Mgmt)	Y	Y
Polen Capital Management	Y	
Principal Financial Group		Y
Principal Global Investors	Y	Y
Private Advisors	Y	
Prudential Fixed Income Management	Y	
Prudential Investment Management, Inc.	Y	Y
Putnam Investments, LLC	Y	Y
Pzena Investment Management, LLC	Y	
Pyramis Global Advisors	Y	

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Manager Name	Educational Services	Consulting Services
Rainier Investment Management	Y	
RBC Global Asset Management (U.S.) Inc.	Y	Y
Research Affiliates		Y
Regions Financial Corporation		Y
RCM		Y
Rothschild Asset Management, Inc.	Y	Y
RS Investments	Y	
Russell Investment Management	Y	
Sankaty Advisors, LLC	Y	
Santander Global Facilities		Y
Schroder Investment Management North America Inc.	Y	Y
Scout Investments	Y	
SEI Investments		Y
SEIX Investment Advisors, Inc.	Y	
Select Equity Group	Y	
Smith Affiliated Capital Corporation	Y	
Smith Graham and Company		Y
Smith Group Asset Management		Y
Standard Life Investments	Y	
Standish (fka, Standish Mellon Asset Management)	Y	
State Street Global Advisors	Y	
Stone Harbor Investment Partners, L.P.	Y	Y
Systematic Financial Management	Y	
T. Rowe Price Associates, Inc.	Y	Y
Taplin, Canida & Habacht	Y	
Timberland Investment Resources	Y	
TCW Asset Management Company	Y	
Thompson, Siegel & Walmsley LLC	Y	
USAA Real Estate Company	Y	
Van Eck	Y	
Versus Capital Group		Y
Victory Capital Management Inc.	Y	
Vontobel Asset Management	Y	
Voya Investment Management (fka ING)	Y	
Vulcan Value Partners, LLC		Y
Waddell & Reed Asset Management Group	Y	Y
WCM Investment Management	Y	
WEDGE Capital Management		Y
Wellington Management Company, LLP	Y	
Wells Capital Management	Y	
Wells Fargo Private Bank		Y
Western Asset Management Company	Y	



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Manager Name	Educational Services	Consulting Services
William Blair & Co., Inc.	Y	Y